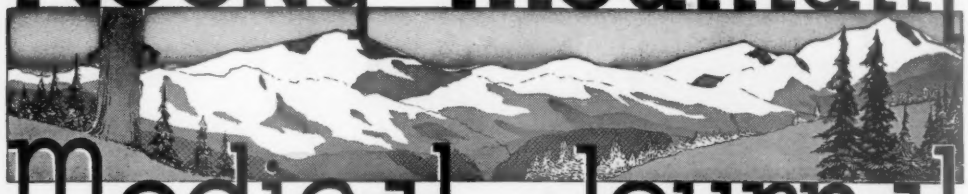
Rocky Mountain Medical Journal



Ogden Surgical Society
May 20, 21, 22

May 1953

Vol. 50—No. 5
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WHITHER GOEST THOU? — WYOMING MENTAL HEALTH PROGRAM
PRECANCEROUS DERMATOSIS — PELVIC TUBERCULOSIS — NON-OSTEOGENIC BONE FIBROMA
COARCTATION OF THE AORTA — PHEOCHROMOCYTOMA

For Table of Contents, Turn the First Page

Parke, Davis & Company announces a new series

THEME: "In the hands of yo

TIME

Ever see a "telegram" from your heart?

PARKE, DAVIS & CO.

SATURDAY EVENING POST

PARKE, DAVIS & CO.

LIFE

DO YOU KNOW THIS MAN?

HIS NEGLIGENCE IS CAUSING THOUSANDS OF DEATHS FROM HEART DISEASE

PARKE, DAVIS & CO.

...vertisements addressed to the general public...

...hysician, you're in good hands"

...glect . . . delay. How many times, doctor, have you ...ered for patients . . . whose hope of recovery might ...ve been bright indeed . . . *but for neglect or delay in ...eking your help?*

Undoubtedly, this occurs so often...and usually with ...ch tragic consequences...that many physicians view ...as the greatest problem facing medical science today.

Moreover, this problem may assume even greater ...nificance with the rising incidence of the degenera...ve diseases. For in these conditions, neglect and delay, ...s you well know, are *directly* responsible for a heavy ...ll of life.

We believe you will agree that this problem deserves ...creased and continuing emphasis. This is why Parke-...avis will publish, throughout 1953, a series of adver...sements on the *patient's responsibility* in medical care.

These advertisements, four of which are reproduced ...ere, will appear in leading magazines reaching mil...ons of families. In them, this central theme will be ...mphasized:

That every individual, if he wants his physician's most effective help, must meet the doctor halfway. *He must not ignore symptoms, or delay treatment. He must act promptly . . . and be made to realize that "in the hands of your physician, you're in* good *hands."*

In addition, the advertisements will stress the fact that medicine has a vast store of new knowledge . . . and that this knowledge is constantly increasing through research by physicians, hospitals, public and private health organizations, and pharmaceutical companies.

A word about the preparation of these advertisements: They have been carefully written to avoid both the possibility of stimulating hypochondria and encouraging self-diagnosis. Equally important, the advertisements make no claims that might cause undue optimism or raise false hopes. We believe these are just the type of informative messages you will want your patients to read. Our efforts will be guided and encouraged by your continued interest and comments.

PARKE, DAVIS & CO.

Research and Manufacturing Laboratories, Detroit 32, Michigan

Table of Contents

VOLUME 50 NUMBER 5

MAY, 1953

protein "PICK ME UP" IN PREGNANCY

"In pregnancy, especially during the last trimester, a protein intake of at least 85 to 100 Gm. daily has been recommended."[1]

"There was a very definite correlation between a protein intake of 85 Gm. or more and the absence of abortion, less anemia of pregnancy, and a higher per cent of excellent babies as graded by the pediatrician."[2]

The problem, however, in pregnancy—as in many other conditions requiring "stepped up" protein intake—is one of appetite. Patients who require large amounts of protein are usually unable to eat great quantities of foods. A heaping tablespoonful of Essenamine is the protein equivalent of more than one fourth pound of beef.

Available in three forms:

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Vanillin Flavored, 7½ oz.
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COMPOUND

Smooth, Micro-atomized Protein Concentrate for Oral Use

Supplies 3 times as much protein as meat—weight for weight.

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1. Guerriero, W. F.: *Texas State Jour. Med.*, 45:274, May, 1949.
2. Dieckmann, William J.: *Quart. Rev. Obst. & Gynec.*, 10:14, Jan., 1952.

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Manuscripts: Scientific Articles, Case Reports, etc., from any state for which this is the Official Journal should be submitted to the Scientific Editor for that state as named in the Editorial Board, above. Other material from any participating state should be submitted to the Associate Editor for that state as named above. Manuscripts from outside the Rocky Mountain area should be sent direct to the Journal office. Manuscripts must be typewritten, double or triple spaced, using only one side of each sheet. It is the policy of this Journal to omit bibliographies.

Advertising: National representatives: The State Journal Advertising Bureau, 535 North Dearborn Street, Chicago 10, Ill. Local advertising from firms in the Rocky Mountain area should be submitted to the Associate Editor of the appropriate state or to the Journal office. Advertising forms close on the 20th of the month preceding publication; allow ten days additional to insure submitting proofs for approval.

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Meat...

and the Low Sodium Diet

The beneficial effect of sodium restriction in the management of hypertension and many types of cardiac disease is firmly established. A low sodium diet aids in preventing edema and frequently leads to a significant reduction in arterial tension.

To emphasize the importance of sodium restriction and to enable the physician to present his patient with an informative discussion of the subject, The American Heart Association has just published a valuable pamphlet entitled "Food For Your Heart."* Covered also in this booklet is the importance of weight reduction in the management of the cardiac patient.

Dietary recommendations for three levels of sodium restriction are given. In all of them, meat is an important constituent of the diet. In the diet providing moderate sodium restriction (0.5 to 1.5 Gm. of sodium), 4 to 6 ounces of unsalted meat, fish or fowl are allowed. In severe restriction (0.5 Gm. sodium), 3 to 4 ounces of meat are permitted daily. The weight reduction-moderate sodium restriction diet calls for 5 to 6 ounces of meat daily.

This booklet again emphasizes the valuable application of meat in the dietary management of cardiac disease, hypertension, and obesity. Since, as the manual emphasizes, infectious diseases and such scourges as typhoid fever have now been controlled with antibiotics, chemotherapeutic agents and modern sanitation, "many physicians and scientists consider nutrition the most important environmental factor in health."

Meat, with its wealth of high quality protein, B complex vitamins and important minerals, plays an important role in the aim toward better national health. That the generous consumption of meat by the American people is a significant factor in attaining this goal is reflected in the statement that "most physicians feel that the high American consumption of protein is a good thing."

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*Food for Your Heart, a Manual for Patient and Physician, Department of Nutrition, Harvard School of Public Health, Harvard University, The American Heart Association, Inc., New York, 1952. Copies available through local Heart Association.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

American Meat Institute
Main Office, Chicago...Members Throughout the United States

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NEXT ANNUAL SESSION: SHIRLEY-SAVOY HOTEL, DENVER, SEPT. 29 to OCT. 2, 1953

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NEXT ANNUAL SESSION: BILLINGS, SEPTEMBER 17, 18, 19, 20, 21, 1953

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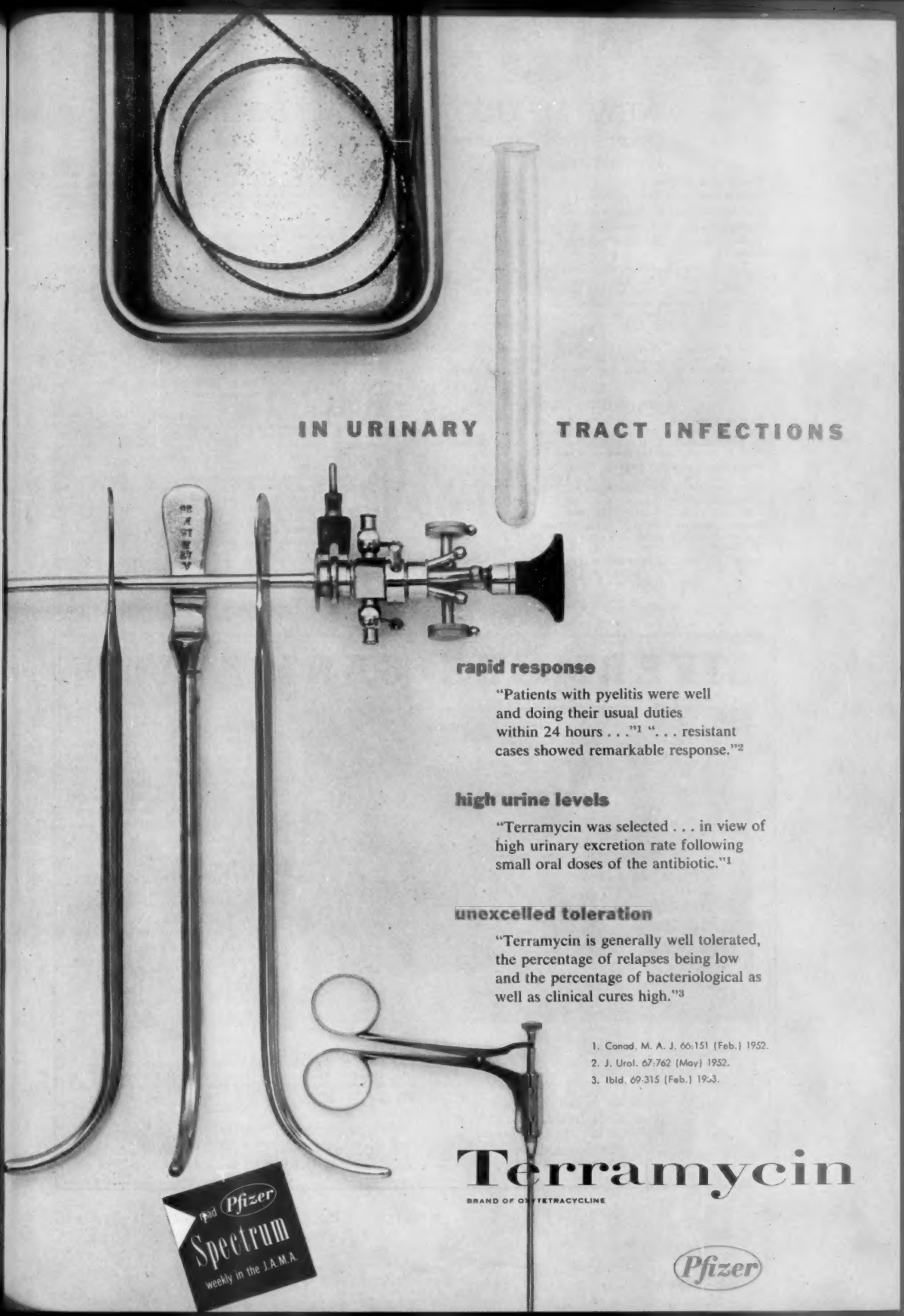
Advisory Committee to Montana Hospital Association: George J. Moffitt, Livingston; Robert J. McGregor, Great Falls; Morris Alan Gold, Butte.

Rocky Mountain Medical Journal: Raymond F. Peterson, Butte, Scientific Editor for Montana; Mr. L. R. Hegland, Associate Editor for Montana.



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1. Canad. M. A. J. 66:151 (Feb.) 1952.
2. J. Urol. 67:762 (May) 1952.
3. Ibid. 69:315 (Feb.) 1953.

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NEW MEXICO MEDICAL SOCIETY

NEXT ANNUAL SESSION: ALBUQUERQUE, MAY 7, 8, 9, 1953

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THE UTAH STATE MEDICAL ASSOCIATION

NEXT ANNUAL SESSION: SALT LAKE CITY, SEPTEMBER 9, 10, 11, 12, 13, 1953.

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Councilor, 3rd District: J. E. Dorman, Price.

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Alternate Delgate to A.M.A., 1952 and 1953: J. J. Weight, Provo.

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Fee Schedule Committee: Wm. Ray Rumel, Chairman, Salt Lake City.

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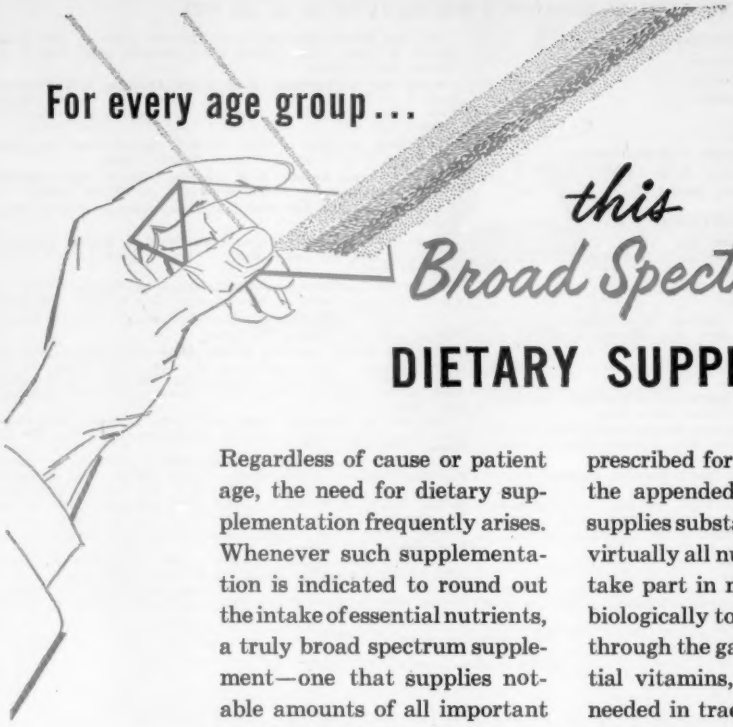
Advisory Committee to Woman's Auxiliary: K. B. Castleton, Chairman, Salt Lake City; Frank K. Bartlett, Ogden; L. W. Oaks, Provo; Homer E. Smith, Salt Lake City; J. R. Miller, Salt Lake City; R. O. Porter, Logan; Vincent L. Rees, Salt Lake City; J. E. Dorman, Price.

Necrology Committee: James K. Palmer, Chairman, Salt Lake City.

UMWA Advisory Committee: Vincent L. Rees, Chairman, Salt Lake City; D. T. Madsen, Price; L. H. Merrill, Hiawatha; W. W. Barrett, Helper; Kenneth D. Castleton, Salt Lake City; E. M. Kilpatrick, Salt Lake City; Rulon F. Howe, Ogden.



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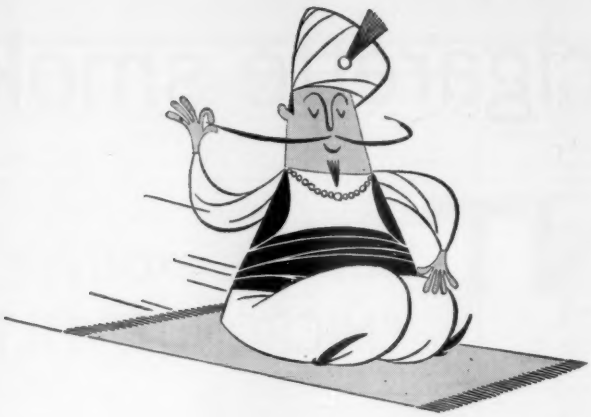
Resolutions: Sister Mary Raymond, Mercy Hospital, Denver; James A. Harrison, Community Hospital, Boulder.



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Announcing a scientifically significant advance in cigarette smoking...

KENT with the exclusive "MICRONITE" FILTER

DOCTORS have long been aware of the need for a really effective filter-tipped cigarette. P. Lorillard Company has been conscious of this problem, and after years of study, experiment and research believes it has developed a cigarette that meets the need.

It is the new KENT cigarette with the "Micronite"* Filter. Recent tests have shown that the Micronite Filter *approaches 7 times the efficiency of other filters in the removal of tars and nicotine* and is virtually twice as effective as the next most efficient cigarette.

All members of the medical profession will be interested in the facts about this new cigarette. To avoid possible confusion or misunderstanding by the general public, the details of the KENT studies given on these pages are for physicians only and will not appear in KENT advertising or promotion to the general public.

Micronite as a cigarette filter...

The new filter material—called Micronite—stems directly from the improved protective filters developed to meet critical air-purification problems in atomic energy plants.

When investigations showed that this filter medium was capable of removing all of the minute particles from a stream of cigarette smoke, the filter was modified for use in KENT cigarettes. *This was done in such a way as to permit the passage of pleasant aromatic smoke constituents, but with a removal of the more objectionable fractions of tobacco smoke to an extent never before accomplished.*

Efficacy of the Micronite Filter

The normal human subjects used in testing the Micronite Filter were divided into two categories—*susceptible and non-susceptible*—on the basis of their subjective reactions to cigarette smoking. Approximately two-thirds of the subjects *in this investigation* were *non-susceptible* while the remaining third were definitely *susceptible*. Other investigations have reported a somewhat similar ratio. (a)

To study the effects of this filter on physiological reactions to cigarette smoke, in both *susceptible and non-susceptible persons*, two different tests were employed, both being measurements of peripheral blood flow.

The first test involves the drop in skin temperature occurring at the finger tip, induced by smoking and measured according to *well-established procedures*. (b, c)

The second test is a measurement of vasoconstriction in the hand, as recorded plethysmographically. (d)

The results of these measurements—determined for Lorillard by an independent research organization—are shown on the four charts reproduced here. Concurrently, other outside independent laboratories are carrying on further research on the chemical and physiological effects of cigarette smoking *with new and original testing methods*.

From these charts, the following general conclusions may be drawn:

When cigarette smoke is drawn through a Micronite Filter, it is no longer capable of producing characteristic changes in peripheral blood flow in either *susceptible or non-susceptible persons*.

The Micronite Filter is vastly superior to *any other available filter now in use* for removing tars and nicotine in cigarette smoke.

*PATENT APPLIED FOR

PHYSICIANS:

Today, KENTs are sold in most major U. S. cities. If your city is not yet among them, simply write to P. Lorillard Company, 119 West 40th Street, New York, N. Y., and special arrangements will be made to assure you of a regular supply.

ll significant development

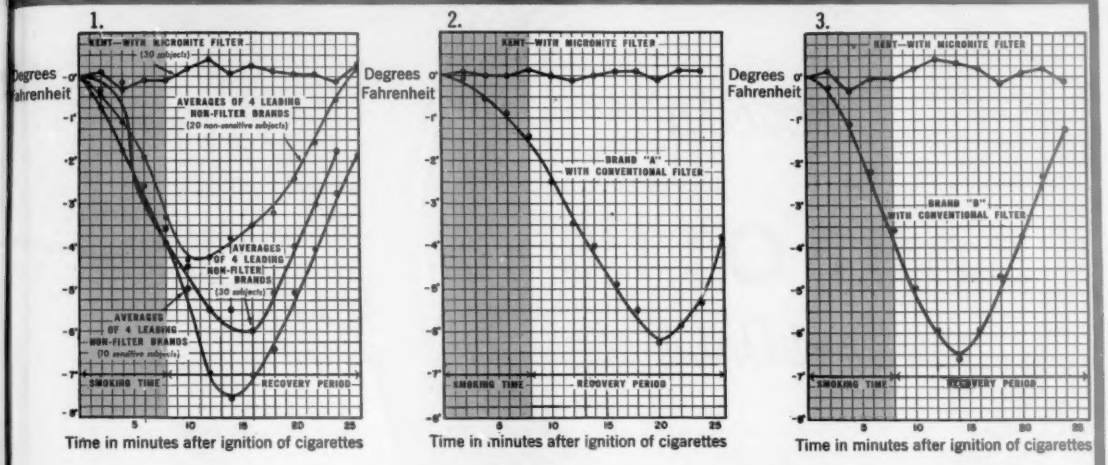
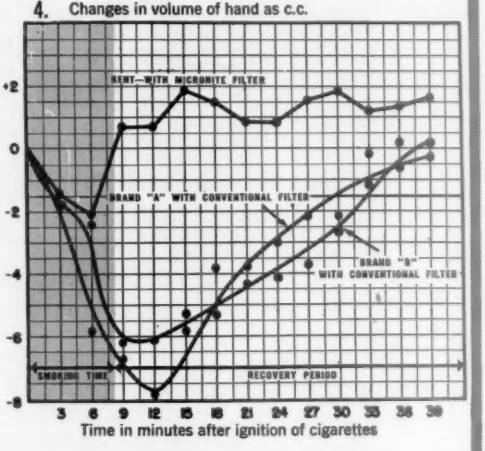


CHART 1. Comparison of KENT with leading non-filter brands. Effects on Peripheral Vascular System. Drop in surface skin temperature at the last phalanx induced by smoking one cigarette.

CHART 2. Comparison of KENT with Brand "A" conventional filter tip. Effects on Peripheral Vascular System. Drop in surface skin temperature at last phalanx induced by smoking one cigarette. Average for 15 susceptible subjects.

CHART 3. Comparison of KENT with Brand "B" conventional filter tip. Effects on Peripheral Vascular System. Drop in surface skin temperature at the last phalanx induced by smoking one cigarette. Average for 15 susceptible subjects.

CHART 4. Comparison of KENT with Brand "A" and "B" conventional filter tip. Peripheral vasoconstriction induced by smoking one cigarette. Peripheral blood flow as measured by continuous plethysmography on the hand. Average for 4 susceptible and 8 non-susceptible subjects.



Here are additional observations from work now in progress:

1. When smoke which has passed through a Micronite Filter contacts the conjunctival sac of the rabbit, far less irritation occurs than when the sac is exposed to the smoke from regular cigarettes or the smoke from popular filter-tipped brands.

2. Current studies also indicate that Micronite-filtered smoke is less irritating to mucous membranes than unfiltered smoke.

When the scientific evidence of the effectiveness of the Micronite Filter is compared *with* the effectiveness of other filters, *it shows that*—

The problem of smoker susceptibility to tobacco irritants may be largely overcome by KENTs. And for those people whose smoking should be restricted for therapeutic reasons, *KENTs should be considered* as the cigarette of choice.

P. Lorillard Company will gladly send you a booklet, prepared especially for the medical profession, which describes more fully the investigational work on the chemical and physiological advantages of the new Micronite-filtered KENT cigarette.

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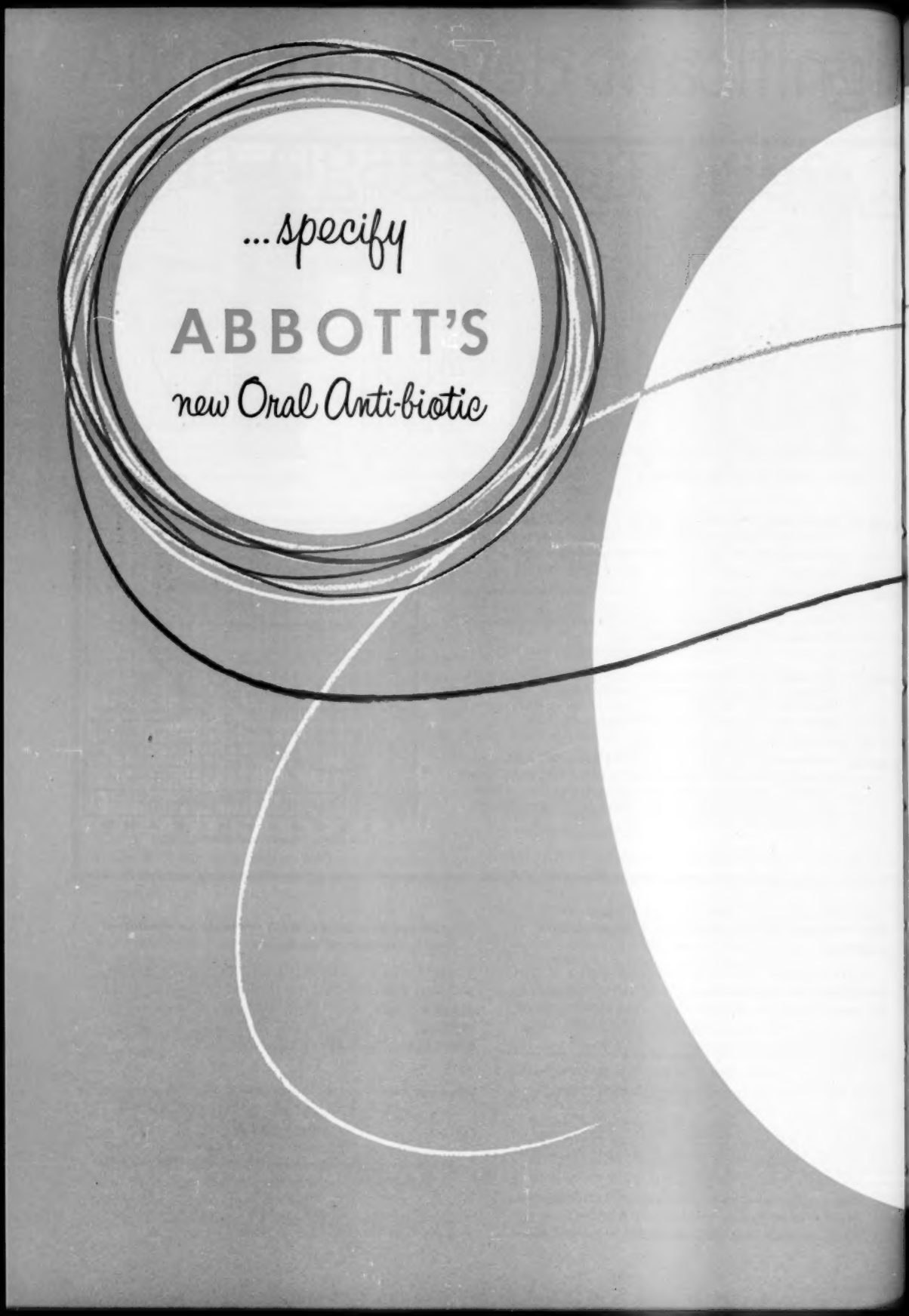
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INDICATIONS Pharyngitis, tonsillitis, scarlet fever, erysipelas, pneumococcic pneumonia, osteomyelitis, pyoderma. *Also other infections caused by organisms* susceptible to its action, including staphylococci, streptococci and pneumococci.

DOSAGE Total daily dose of 0.8 to 2 Gm., depending on severity of the infection. A total daily dose of 0.6 Gm. is often adequate in the treatment of pneumococcic pneumonia. *For the average adult* the initial dose is 0.2 Gm. to be followed by doses of 0.1 or 0.2 Gm. followed by doses in the same range every four to six hours. *For severely ill patients* doses up to 0.5 Gm. may be repeated at six-hour intervals if necessary. Satisfactory clinical response should appear in 24 to 48 hours if the causative organism is susceptible to ERYTHROCIN. Continue for 48 hours after temperature returns to normal. Abbott

1. McGuire et al. (1952), J. Antibiotics & Chemo., 2:281, June.
2. Heilman et al. (1952), Proc. Staff Meet. Mayo Clin., 27:385, July 16.
3. Haight and Finland (1952), New Eng. J. Med., 247:227, Aug. 14.

Rocky Mountain Medical Journal
Colorado
Montana
New Mexico
Utah
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MAY
1953

Editorial

Let's Pay Our Way

A COLLEAGUE has said, "Professional courtesy is a notable tradition, but it's outmoded." He was referring to ethics which restrict a physician from charging a colleague for services to himself or family. Most of us, when in need of medical service, would prefer to be buyer rather than beggar. With understandable reluctance, we accept a place of top priority in claiming the time and talent of our colleagues. Since the fellow physician will not accept a monetary fee, we give him a gift—which he probably neither needs nor wants. The cost of the gift can't even be claimed as a medical expense on income tax return. Thus, every one loses except the merchant who sold the gift. A young obstetrician has a desk drawer full of pen and pencil sets which constitute the only material evidence of a few thousand dollars' worth of service to doctors' wives. The young man, believe us, could use some money to help support a young and growing family.

Physicians and their families not infrequently go to other cities for surgery or medical study rather than offend or impose upon local colleagues. It has been facetiously claimed that ills of doctors' wives go begging when husbands run out of samples! There is some truth in this far-fetched statement, and our dependents sometimes go without early diagnosis and the best care rather than impose upon other doctors. If we could not afford to pay our way, it would be different; but when we can afford it we should pay—and even profit by playing, temporarily, the role of "layman."

Physicians are among the best buyers of health, accident, and hospital insurance. Many have added the names of themselves and family to prepayment plans which also include medical and surgical service. When time of need occurs, they will feel at liberty to call the physician of choice as a paying customer. Confidence will prevail more than it possibly could if the service were "free." The inevitable feeling of imposition will be dispelled; good feelings and mutual understanding will displace the dissatisfaction of a "free ride."

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Sand and Sandpaper

A NEW medical viewpoint toward press relations has prevailed in recent years. It is an essential part of modern public health education. Its value and necessity are established facts.

The Press Relations Director of the American Medical Association, John L. Bach, published a pamphlet, "Doctor, Meet the Press," last summer in which he stated: "The choice is not between publicity and no publicity. Rather it is the choice between authentic news reports prepared with the active cooperation of physicians and 'black market' publicity of questionable accuracy." Further, he may be quoted as saying, "To adopt a policy of not quoting authorities would open the way for unreliable reports on medicine by irresponsible publications . . . the public has a right to know whose work is being described."

We should be willing to go along with the trend, and with the sincere motives the trend represents, toward informing the public truthfully in matters of life, health, and favorable appearance.

However, lay authors are sometimes prone to glamorize the information which they use in producing such articles. For example, two articles appeared during March—one in the Rocky Mountain News (Denver) and one in the Saturday Evening Post. Each had to do with removal of freckles, tattoos, acne scars and other cutaneous blemishes with sandpaper. The

term "removal" to a layman means just that, and he pictures effacement of his disfigurement without residual scar or other evidence of the problem or its treatment.

Unfortunately, the treatment is rarely that good. Innumerable physicians have been asked about it and are not prepared to supply a factual answer. The Saturday Evening Post article appeared complete with color photographs. The Public Relations Committee of the American Society of Plastic and Reconstructive Surgery had assisted in its preparation and helped keep it within unsensational limits but, unfortunately, was not consulted in the choice of photographs. The committee had twice revised and toned down the article by Mrs. Jane Shannon, but the Post did not consult Dr. Iverson or the committee after preparation of the picture layout. Dr. Iverson protested to Steven Spencer, medical editor of the Saturday Evening Post, who defended his magazine's action largely upon the basis of statements by Mr. Bach of the A.M.A. It is difficult to d e n y that our profession "should encourage rather than criticize honest and accurate efforts made by the press to familiarize the public with these contributions."

However, we should tell the whole truth and not just half of it. There is nothing new in the principle of superficial removal of epidermis. A text book on dermatology published in 1921 states: "Most of the methods employed by charlatans for the removal of freckles depend for their success upon thorough blistering of the surface. Inasmuch as by this process the epidermis is removed, the pigment is also measurably removed with it, and the new epidermis is for a time free from blemish. But in all such cases the ultimate result is a deeper and more persistent pigmentation than that which was previously visible." There is questionable difference whether tissue is removed by blistering or by mechanical abrasion. If the process removes the stratum granulosum of the epidermis, new scar will appear incidental to healing. Also, ultimate "deeper and more persistent pigmentation" is a common phenomenon in tissues which have been grafted, b u r n e d, ulcerated, abraded, or scraped.

Initial enthusiasm on the part of doctor and patient is destined for disappointment in at least some cases after end results are established. Many tattoos are deep, and superficial "removal" will show the pigment more boldly than ever; deep abrasion will beget scar, perhaps pigmented scar—an unfavorable exchange. Few, if any, cysts and deep cutaneous tunnels and pits secondary to severe acne can be sanded or sliced off successfully; normal epidermis between pock marks usually will heal back to or nearly to its former level.

Obviously, prognosis should be guarded in every instance. And when one defect is apt to be substituted for another, patients are entitled to full discussion and insight into all potentialities. Disappointment, frustrated hopes, and embittered criticism of our profession will be avoided when authors tell their readers—both pro and con, with admitted limitations and impartial appraisal—the whole story.

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Spring Meetings

GREATEST of the springtime medical assemblies is the Annual Session of the American Medical Association, this year to be held in the nation's metropolis, New York City. The official dates are June 1 to 5, but official dates need to be expanded in both directions because many related bodies meet for anything from a day to a week in advance and for several days after the actual Annual Session.

This year it will be one of the greatest and perhaps the largest A.M.A. Annual Session ever conducted. Look back, now, at the April 11 issue of your A.M.A. Journal and again examine the complete program. If you can possibly go, do so, and make those hotel reservations early—they'll be at a premium, even in New York.

Another notable medical assembly in our own region is the annual meeting of the Ogden Surgical Society, this year scheduled for May 20, 21 and 22. As usual, the Society will offer a fine program by fifteen or more nationally acclaimed physicians. As we go to press the detailed p r o g r a m has not reached this Journal, but all readers are urged to watch for its appearance in pamphlet form and to attend if possible.

Original Articles

WHITHER GOEST THOU?*

JAMES T. FINLEN, L.L.B.
BUTTE, MONTANA

The archaic title for my remarks, though sounding Biblical, is not to be construed as indicating disposition to discuss the destiny of man's spirit after separation from his mortal remains. I propose to speak concerning what I conceive to be the most vital subject, aside from the spiritual, which can be directed to the attention of any American.

My subject is the future of our country.

In this critical period, when many are the threats to national security, I shall dwell upon the form of our Government, in hope that reflection upon its majestic benefits may increase determination to preserve it. Appreciation of how the safeguards conceived and established for us have secured us, even in the face of the harshness of the past, should temper the spirit to resist the challenges of the present and the future. In this connection, it is pertinent to observe in reference to my profession, whose basic traditional duty is to uphold and defend the American concept of government, and in reference to your noble profession, called upon to stay the hands of those who would nationalize and thus degrade it, there could be no more beneficial union of two callings than the amalgamation of our professions to the extent necessary to meet in defense of our common cause.

Some among you may feel that if ever the future of America was in jeopardy, that day has ended. Such assurance is successfully challenged by consideration of the lessons of history, which demonstrate irrefutably that the price of liberty is eternal vigilance and that no invitation to destruction could be more acceptable than one emanating from complacency.

It is perhaps only natural that many Americans, surrounded by the benefits of the most advanced material state the world has lived to know, enjoying the highest wages, the best working conditions, the most leisure, the greatest quantity and quality of accessories to good living, including the safeguards to good health, should be more concerned with getting and spending than with what is happening to their government. Yet, for those concerned most with getting or spending in which this may appear an exhuberant hour, as well as for those concerned most with events in Korea in which this must be a tragic hour, and for all of America in which this is an uncertain hour, it is meet to consider how America became America, and how we can keep it America.

Men from their origin lived in families, then clans, then tribes. Need for headship evolved recognition of the father, and then the chief, as the leader. As men manifested more gregariousness, the idea of kingship grew to acceptance. The king gave, interpreted and enforced the laws, regardless of the will and without thought of necessity for consent of the governed. From domination by power of military leaders came military dictatorships, such as Cromwell's England and Napoleon's France, but, by such, the monarchial theory of "I am the State" was only enhanced.

In due time came democracy, predicated upon the principle of rule by an acting majority of men. Such was Plato's Athens. It perished because of the "madness of the multitude." This involves exercise of absolute power by a majority of men rather than by only one. I would not commit my life to the former any sooner than I would commit it to the latter. Matthew Arnold, in referring to what he called "the unsound majority,"

*Condensed from an address delivered before the Interim Session banquet of the Montana Medical Association at Helena, March 13, 1953. The author is Western General Counsel for the Anaconda Copper Mining Company. The author wishes to note that in preparation of this address he was greatly benefited by the writings of the Hon. Frank E. Holman, L.L.B., of Seattle.

warns us that "it lacks persistence; if today its good impulses prevail, they succumb tomorrow."

The rule of the mob—and history has proved it time and again—can be just as despotic as the rule of the lone dictator. Between them I have no preference, because either and both can be tyranny, and I hold no belief that tyranny by temporary majority is less obnoxious than tyranny by dynasty. The old New England town meeting was democratic. It was under that kind of rule that men were deprived of personal liberty. Who drove Roger Williams from Massachusetts, excluded Roman Catholics from all American colonies except three, and hanged Quakers on Boston Common? Is the mob's lynching inspired by benevolence or is it more righteous because attended by most of the town's citizenry?

That kind of rule is the rule of men.

Experience with that kind of rule led the founders of America to establish a different kind, a kind of rule which had never been ventured until their experiment was launched following the Revolutionary War. They established a government of law, a government of liberty under law rather than a government of men. They established this Republic, a representative commonwealth where all powers are derived from and exercised with the consent of the governed, within the framework of constitutional guaranties protected by an independent judiciary. The Constitution guarantees you, a single, lone individual, certain rights which cannot be alienated by the President of the United States, or even though the transitory passions of a majority of your neighbors would will them swept away.

Recognizing the importance of such guaranties, in his first inaugural Lincoln said:

> "If, by the mere force of numbers, a majority should deprive a minority in any clearly written constitutional right, it might, in a moral point of view, justify revolution —certainly would if such a right were a vital one."

Our charter of freedom, establishing our form of government, granting limited powers to its executives, legislators and judges, did not profess to be a concession to the people but rather, as shown by the words in its Preamble, "We, the people . . . do ordain and establish this Constitution . . .," declared the fountainhead of authority to be the people themselves.

In securing the blessings of liberty, the majority recognized the sacredness of the individual by insuring him against undue suspension of habeas corpus, compulsion of self-incrimination, double jeopardy, excessive bail or fines, infliction of cruel and unusual punishments, denial of the right to vote on account of race, color or previous condition of servitude, deprivation of life, liberty or property without due process of law, the taking of private property for public use without just compensation, denial of equal protection of the laws; by abolishing slavery and involuntary servitude except after conviction as a punishment for crime; by recognizing the right of one tried for crime to be informed of the nature and cause of the accusation, to be confronted with the witnesses against him, to have compulsory process for obtaining witnesses in his favor, to have, at the expense of government, the assistance of counsel for his defense, to speedy and public trial by an impartial jury; by assuring freedom of religion, speech, the press, the right to assemble and to petition for redress of grievances, to keep and bear arms, to be free against unreasonable searches and seizures.

The Constitution requires the United States to guarantee to every state in this Union, not a democratic, but a republican form of government; and requires all officers of every branch of the Federal Government, including the President, to be bound to support the Constitution.

It provides that enumeration in it of certain rights shall not be construed to deny or disparage others retained by the people; and declares that powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively or to the people.

Yet, these high-minded declarations would be only that and nothing more without an independent judiciary to implement them. Russia has a constitution. As I recall it from casual reading, it is replete with recitals of lofty purpose, but it is merely a paper declaration, dead and meaningless. It has no independent judiciary to protect the

guaranties it professes to assure. One might presume that every educated person would realize that without an independent guardian of individual liberty there can be no such liberty.

Still, not long ago a group of educators, led by Dr. Hutchins, then President of the University of Chicago, proposed as a model world constitution a document providing for a President, who was to be the Chief Executive of the world government **and** also the Chief Justice of the World Court. What would be the decision of a President, determined to order your steel plant or your medical office closed, sitting as the Chief Justice under a constitution such as ours, reserving to the people all rights not delegated, claiming inherent power, despite the constitution, to bend you to his will?

Benjamin Franklin, emerging from Independence Hall after the final meeting of the Constitutional Convention, was asked what kind of government had been provided. His reply: "A Republic, if you can keep it."

Can we keep it? That is the question.

In complete antithesis to our own form of government is the theory of absolutism, any form of which reduces the individual to the status of a regimented pawn of the state. Whatever has been accomplished by the elimination of Messrs. Hitler, Mussolini, and Stalin, the specter of world-wide totalitarianism still hovers over the lives of all men. It enslaves Communist Russia and all of her satellites, Fascist Spain, Communist Yugoslavia and China, and most of the so-called Republics of Central and South America. Even New Zealand and Australia and, for a while at least, England and France, succumbed to a form of collectivism —State Socialism. They are all modern versions of ancient forms in the historical parade of absolute rule darkening most of the pages of history.

Aside from threats from other continents, our own form of government is imperiled by direct and indirect influences working against it here, even though ours is the only nation which has accomplished enough to attempt to underwrite and sustain the shattered economies of practically all of the peoples of the free world. I shall allude to only a few of the many such influences at home.

Some through ignorance, many by design, would have us believe that our heritage is a democracy. The reference to it as such first became common during World War I. Even our President of that era professed to "make the world safe for democracy." This is a strange phenomenon in the face of the facts that even the word "democracy" nowhere appears in such historic documents as the Articles of Confederation, the Declaration of Independence, the Constitution of the United States, Washington's Inaugural or his Farewell Address, Jefferson's or either of Lincoln's Inaugurals or his Gettysburg Address. The United States Army manual correctly states: "The Government of the United States is not a Democracy but a Republic." Every Boy and Girl Scout should know the fact through repetition of the Pledge to the Flag: "I pledge allegiance to the flag of the United States of America, and to the Republic for which it stands . . ."

In setting out to "make the world safe for democracy," we overlooked the fact that we ourselves were not a democracy and, incidentally, we failed to inquire whether the world wanted a government like ours anyhow. Later we discovered that most of the world did not!

You are all familiar with the publicized facts concerning Elizabeth Bentley. Product of five generations of American forebears, she fell easy victim to ideological glories of Communism. Although an honor graduate of both Vassar and Columbia, she was never exposed, so she herself testified, to a course in American History or any other course teaching knowledge of, appreciation for, or loyalty to American institutions. Hers is no isolated example. Students today may graduate from American colleges or universities without having had any work in American history, as such. Too frequently history is taught merely as a political or social theory, not as the record of man's aspirations, his achievements, his failures. One deprived of instruction in the historical struggles to obtain our basic rights can scarcely be expected to realize or appreciate that the Constitution of the United

States is the priceless achievement of those struggles.

Our sons and daughters are not only deprived of learning what they should be taught about the American form of government, they are taught to embrace much which they should not heed. There are laws against the sale of goods in commerce by the use of false labels, but spurious ideas are peddled freely from high places. With five-sixths of the world's population pitted against us, most of such population knowing nothing or caring less about our unique and priceless heritage, there are those at home who ignore the concepts which made us great and mutter fallacious notions of idealistic drivel.

Not too long ago the late Wendel Willkie proclaimed that all of this earth were of "one world" and that on his flying trip around the globe he had found a "gigantic reservoir of good will." His book kindled great enthusiasm in America for his "grand adventure," his one-world concept of international affairs. If we had been less idealistic and more realistic, with respect to the Russians, at least, we would hardly have more unsettled problems today.

Excitement was provoked when we were introduced to the proposal that we were fighting World War II to make the world safe for four apparently newly discovered freedoms, freedom of thought, of speech, from want and from fear. As a child, I recall a famous Ringling elephant. Jumbo could think as he pleased; he could also trumpet as he wished. With his keeper feeding and watering him daily, to say nothing of the countless peanuts which many little Jim Finlens of that young generation poked his way, he enjoyed freedom from want. With his natural enemies, the lion and the tiger, separated from him by cages of steel, he enjoyed freedom from fear. Yet what thinking American would trade his lot for Jumbo's, giving away the kind of freedom guaranteed by our Constitution, which all persons governed by the whims of men, like Jumbo, have no chance to enjoy?

It is well that men, driven by want and fear, established for us the only freedom worth fighting for, freedom of individual initiative, which Mr. Justice Brandeis called "freedom to be let alone." The men who fought to establish that most comprehensive of valued rights didn't fight for freedom from bad weather, nor crop failure, nor hunger. They fought to gain the right to live and work, free from the power of autocratic government, each man according to his talent and his choice. Should we lose that right, what would it profit us to secure for ourselves, or even for the entire world, the freedoms of recent proclamation—already secured to the convict in his cell?

Let me direct you to just one more of many other proposals to destroy our freedoms. Our own government—including its then representative, Alger Hiss—before the ink dried establishing the United Nations, enlisted our sympathies by such appealing phrases as "achieving human rights for all the world," to support what was called the "Universal Declaration of Human Rights," celebrated as a "Charter of Human Liberty." The program, accepted by the General Assembly of the United Nations, was largely sponsored by Mrs. Roosevelt, a member of an international commission — otherwise composed of foreigners including three Russians. The declaration provides that everyone has the "right to social security," to "just and favorable remuneration," to "rest and leisure," to "food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age," with nary a provision that he shall work for such rights or help pay for providing them.

Put those pronouncements into treaty form, ratified by the Senate, advocated by its proponents, and you would transform the Republic of the United States into a socialistic state. If everyone should elect to retire from his toils and accept the benefits of such a world-wide W.P.A., Alger and Eleanor left to conjecture who would pay for it!

Daniel Webster uttered the terrible challenge of our day when he said:

> If disaster ". . . exhaust our treasury, future industry may replenish it; if it desolate and lay waste our fields, still under a new cultivation they will grow green again and ripen to future harvest. But who shall

reconstruct the fabric of demolished government? Who shall rear again the well-proportioned columns of constitutional liberty? Who shall frame together the skillful architecture which unites national sovereignty with state rights, individual security, and public prosperity?"

The best answer to that question is to prevent it arising. The only assurance of such prevention is an enlightened America. If the people of this great Republic are informed of the historic struggles to obtain their basic rights, if they are brought to realize the nature of those rights and why they are priceless, it then must follow as day does night they will yield to no force, or subterfuge, or abdication by lethargy, in determination to protect and preserve them.

PRECANCEROUS DERMATOSES*

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The remarkable tendency for cancer to develop frequently in a certain group of skin disorders has given rise to the descriptive term "precancerous dermatoses." The group includes (1) senile keratoses; (2) keratoses which result from the administration of inorganic arsenic, exposure to tars and certain related compounds and roentgen irradiation; (3) leukoplakia; (4) kraurosis vulvae; (5) Bowen's disease; and (6) xeroderma pigmentosum. Most precancerous lesions of the skin are amenable to treatment if recognized during their period of evolution. Important features of the precancerous dermatoses, including treatment, will be described in succeeding paragraphs.

Senile Keratosis

Senile keratoses are circumscribed, rough, moderately elevated, brownish lesions which vary from a few mm. to a cm. or two in diameter. The lesions may be solitary or numerous and the scale which covers them is tightly adherent and leaves a moist, bleeding surface when removed. Senile keratoses usually occur on the forehead, face, ears, neck and backs of the hands (Fig. 1) of individuals who have passed middle life and who have reddish or sandy-colored hair, blue eyes and a tendency to freckle on exposure to sunshine. They are far commoner in men than in women. The involved skin frequently shows other evidence of senile changes including atrophy, hyperpigmentation, telangiectasia and dryness. This type of skin is sometimes referred to as "farmer's skin" or "sailor's skin."

Inflammation, rapid growth and ulceration of a senile keratosis are common signs of malignant alteration. The carcinomas which develop are almost always squamous cell in type.

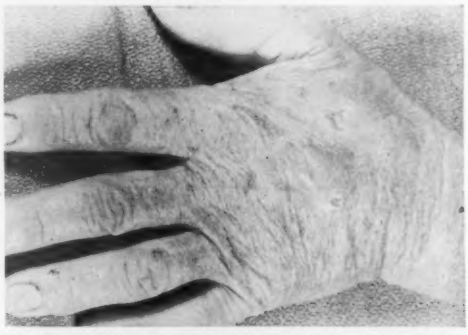

Fig. 1. Senile keratoses on the back of the hand. The same patient had many other senile keratoses on the face and on the ears.

Most senile keratoses can be successfully treated by thorough curettage and electrodesiccation or cauterization of the base. Surgical excision may be preferable in certain cases, depending on such factors as the size and location of the lesion and whether or not there is clinical evidence which suggests that malignant change has already taken place. Avoidance of long-continued exposure to sunshine and the use of protective ointments and lotions (those which contain para-aminobenzoic acid are among the best) is advisable for patients with "farmer's skin."

*Presented at the Sixth Annual Rocky Mountain Cancer Conference, Denver, July 9-10, 1952. From the Department of Dermatology and Syphilology, University of Virginia Medical School, Charlottesville, Virginia.

Keratoses From Arsenic, Tars and Roentgen Irradiation

Arsenical keratoses usually follow the administration of inorganic arsenicals, such as Fowler's solution, in the treatment of chronic dermatoses and neurological disorders. Arsenical keratoses, which resemble senile keratoses or warts in appearance, occur by predilection on the palms and soles (Fig. 2), as contrasted with senile keratoses, which occur on the backs of the hands and the face. Arsenical keratoses are usually multiple and may develop in a few months or many years after administration of the arsenic. They are asymptomatic except on the soles where they may be painful on walking. In addition to the palms and soles, arsenical keratoses occur at times on the backs of the hands, the face, extremities, trunk and occasionally on mucus membranes. Squamous cell carcinomas develop in many arsenical keratoses. Thorough curettage, followed by electro-desiccation or cauterization, is satisfactory treatment for most arsenical keratoses. Surgical excision is preferable if there is evidence of malignant change in the lesion. Multiple arsenical keratoses of large size on the fingers (a common site), especially if there is evidence of malignant change, may necessitate amputation of one or more of the digits.

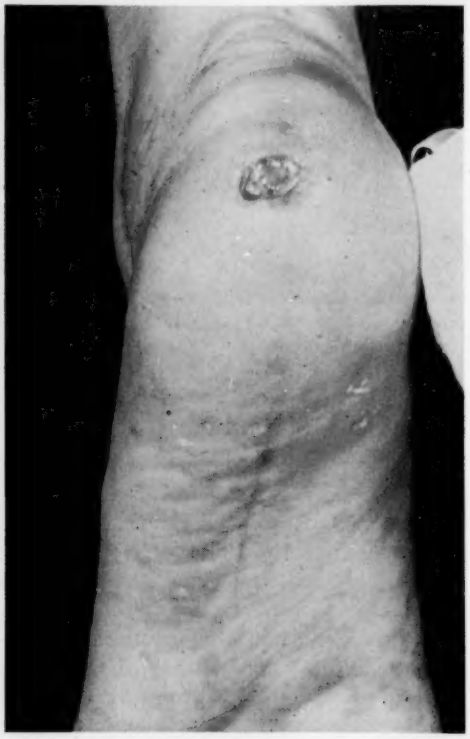

Fig. 2. Multiple arsenical keratoses on the sole and a squamous cell carcinoma on the heel which developed in an arsenical keratosis.

Coal tar and coal-tar products, especially pitch, which come in contact with the skin, are the most frequent causes of occupational cancer (Schwartz, Tulipan and Peck). Keratoses similar in appearance to senile keratoses, warty excrescences or chronic dermatitis caused by the tar or its products usually precede the development of tar cancers, but occasionally such neoplasms develop from apparently clear skin in patients who work with these agents (Eller and Eller). The neoplasms are usually squamous cell in type. Prophylactic measures directed toward the avoidance of further exposure are important in the treatment of precancerous lesions caused by tar. Keratotic lesions which do not involute promptly after the initiation of prophylactic measures, and tar carcinomas, should be treated as described under senile keratoses.

Roentgen keratoses, which may follow the use of either x-ray or radium, usually develop on skin which shows evidence of chronic roentgen dermatitis, including atrophy, hyperpigmentation, telangiectasia and dryness (Fig. 3). Roentgen keratoses may be exceedingly tender but otherwise they resemble senile keratoses, while the skin on which they occur resembles closely the previously described "farmer's or sailor's skin." Neoplasms arising in roentgen keratoses are usually squamous cell in type. Most roentgen keratoses and the carcinomas which arise in them can be treated as described under senile keratoses.

Leukoplakia

The mouth, including the lips, gums, buccal mucous membranes and tongue, is the common site for the development of leukoplakia, but leukoplakic lesions may also occur on the genitalia. Leukoplakia of the mouth, which occurs chiefly in men, will be described here. Syphilis is acknowledged to be the precipitating factor in many but not all cases of leukoplakia of the tongue, while chronic trauma is the commonest dis-

coverable etiologic factor in leukoplakia of the lips, gums and buccal mucus membranes. The chronic trauma include such agents as excessive smoking, ill-fitting dentures, rough teeth and electro-galvanic currents

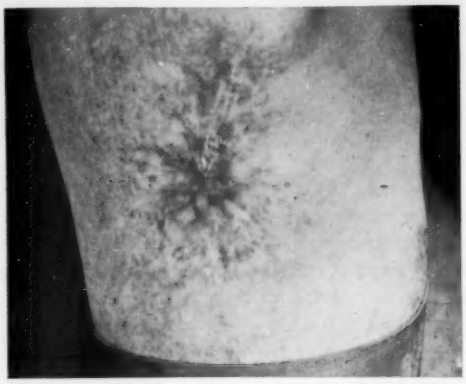

Fig. 3. Roentgen dermatitis and roentgen keratoses at the center of the lesion.

generated between dental fillings of different metals. Fully developed leukoplakic lesions are white patches or plaques of irregular size and shape which are rough to the touch and are tightly adherent to the mucus membranes (Fig. 4). Patches of leukoplakia may be senstive to hot and spicy foods and beverages and often become painful if fissures and cracks develop. Carcinomas which arise in leukoplakia are squamous cell in type. Therapy of leukoplakia includes the elimination or treatment of discoverable etiologic factors, followed by thorough cauterization or surgical excision of the lesion if involution does not subsequently occur, or if there is any suggestion of malignant change.

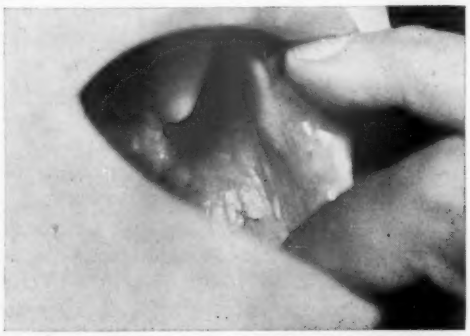

Fig. 4. Leukoplakia of the buccal mucous membrane.

Kraurosis Vulvae

Kraurosis vulvae occurs in women who have reached the menopausal age and older. Fully developed kraurosis vulvae is characterized by sclerosing, progressive atrophy of the mucous membranes of the external genitalia. The mucous membranes are smooth, shiny and dry and the vaginal orifice becomes stenosed (Ormsby and Montgomery). The color is white, waxy-yellow, red or spotted (Ormsby and Montgomery). Itching is usually severe (Sutton). Leukoplakia frequently complicates kraurosis vulvae and this in turn is frequently complicated by squamous cell carcinoma. Mild cases of kraurosis vulvae with little or no itching, and without leukoplakia, do not require treatment. Vulvectomy is usually indicated in fully developed cases of kraurosis vulvae, especially when leukoplakia develops. Estrogenic hormonal substances have been advocated but have not proved consistently effective in treatment of this disorder.

Bowen's Disease

The lesions of Bowen's disease are scaly or crusted, sharply defined but irregular, dull-red plaques (Fig. 5). They may be single or multiple and vary from a few mm. to several cm. in diameter. The lesions increase in size only very slowly and at times spontaneous healing may take place in a part of the lesion. Patches of Bowen's disease are usually found on the trunk but they may occur elsewhere on the skin. The lesions of Bowen's disease can be satisfactorily treated by thorough curettage followed by electro-desiccation or cauterization, by surgical excision or by roentgen therapy.

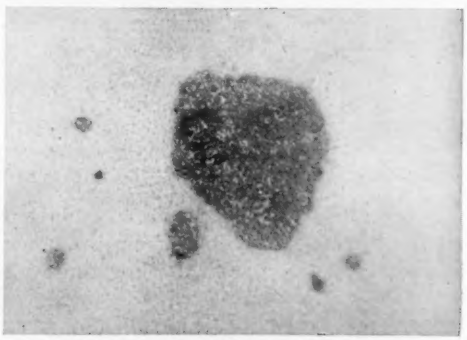

Fig. 5. Bowen's disease, showing one large and several small lesions.

Xeroderma Pigmentosum

Xeroderma pigmentosum, fortunately, is a rare disease. The disorder usually, but not invariably, begins in the first year or two of life. It is characterized by large and small freckle-like lesions intermingled with atrophic white spots, telangiectases, keratoses and warty excrescences, producing a clinical picture not unlike chronic roentgen dermatitis or severe "farmer's skin." The regions usually affected are the exposed surfaces of the body, including the forehead, face, neck, hands and forearms. The disease is inherited and the individuals who have it are sensitive to light, especially to ultraviolet radiations in the neighborhood of 3,000 Angstrom units (Ormsby and Montgomery). There is marked photophobia, keratitis is common, and vision is frequently impaired or lost. Basal and squamous cell carcinomas develop and many of the patients die of cancer before reaching adult life. There is no consistently satisfactory treatment for xeroderma pigmentosum. Exposure to sunshine should be avoided insofar as possible and ointments and lotions which have a protective effect against sunshine should be used on the skin. The keratoses and carcinomas are treated as described under senile keratoses.

Summary

The precancerous dermatoses, most of which are amenable to treatment if recognized during their period of evolution, have been described and their treatment has been discussed.

PELVIC TUBERCULOSIS

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SHERIDAN, WYOMING

Tuberculosis of the female reproductive organs is practically always secondary to a primary focus elsewhere in the body, although occasionally there have been cases reported as primary. Cases of primary pelvic tuberculosis are those in which a careful history and exhaustive x-ray and laboratory studies fail to reveal the presence of a focus elsewhere. This disease is usually found in women between the ages of 20 and 40, the average being 34 years of age. Infection of the female organs by the Mycobacterium tuberculosis is found in 5 per cent of all pelvic infections. Our incidence in the United States seems to be lower than that reported by European or South American authors. Schmidt and Faulkner from Western University reported an incidence of 2.47 per cent, while Vieira from Chile had an incidence of 14.7 per cent among 1,710 gynecological patients.

Pathology

Tuberculosis usually spreads to the pelvis via the hematogenous route from the lungs, by direct extension from the intestines due to caseous ulcerations of the wall, or through the lymphatics. Once in the pelvis it is usually a descending infection with the fallopian tubes most affected. In the order of their frequency the tubes are affected in 90 per cent of the cases, involvement of the endometrium in 75 per cent, the ovaries in 30 per cent, the cervix in 5.5 per cent, and the vulva and vagina in only 0.5 per cent of the cases.

Some European gynecologists do not agree with the criteria established years ago that this is a descending infection in the pelvic organs. They have questioned this fact because of the cases of tuberculous endometritis found in studying sterile couples where the tubes were patent. Nevertheless, exhaustive clinical and pathologic studies made by Greenberg have found tubal involvement in 100 per cent of the cases, while the corpus uteri was involved in only 45 per cent, the endometrium being the portion of the uterus most frequently affected. It is the belief of most of the leading gynecologists that cases of tuberculous endometritis, without tubal involvement, are of hematogenous origin from distant foci.

The initial invasion in the tube occurs in the musculature and then spreads at the same time to the serosa and mucosa. The route of spread seems to be from tube to cervix and fimbria to cornua. The process

is what Schramn and Simonds called a "bacillary catarrh." The mucous membrane is covered with thick ulcerative pads of caseation and, if old, partly organized or even calcified masses. The abdominal end of the tube is exudative, while the middle portion is patched with fibrin and the uterine end is nodular.

In an extensive study of sixty-six cases of tuberculosis of the tubes made by Murray, the lesion was found extended to the muscularis in 26 per cent, and to the serosa in 21 per cent, while only 15 per cent was localized in the mucosa. All layers were involved in 39.47 per cent of the cases. The ovarian lesion is usually a peri-oophoritis because the thick tunica albuginia serves as a good defense mechanism. However, breaks in the ovarian surfaces due to ovulation may permit the entrance of the tubercle bacillus and, at times, even large tubo-ovarian abscesses may form.

Some degree of peritonitis commonly accompanies tuberculous salpingitis. From a clinico-pathologic standpoint, there are three types:

1. The "wet" type, in which there is an outpouring of straw-colored fluid into the peritoneal cavity, the tubes are enlarged and edematous and there are numerous small tubercles covering the serosal surface. There is no doubt that this form of spread is hematogenous in origin.

2. The "dry" or adhesive type, in which bowel adheres to bowel by dense adhesions that blend with the musculature. Separation of these adhesions is extremely difficult and accidental injury to the bowels during surgery is common. Tubo-ovarian abscesses are very often present in this type of peritonitis.

3. This type, which is of particular interest to gynecologists because it represents an obvious direct extension of the tuberculous process from within the tubes to the surrounding peritoneum, is that in which there are scattered tubercles in the serosa of the tubes, uterus, sigmoid and perhaps even in the cecum and appendix. This form responds satisfactorily to surgery.

Symptomatology

The most common complaints of patients with pelvic tuberculosis are dysmenorrhea, pelvic distress, and menstrual disturbances. Abdominal pain is usually the presenting symptom and in most instances it is bilateral. Dysmenorrhea has been reported present in 21 to 62 per cent of cases. Of the menstrual irregularities, oligomenorrhea and amenorrhea are found more often than menorrhagia or metrorrhagia especially if the pelvic tuberculosis is secondary to an active pulmonary focus. Amenorrhea was present in 18 per cent of the cases studied by Vieira, while Schmidt, Faulkner and Greenberg had an incidence of 30 per cent. Shroeder reported normal ovarian cycles in 75 per cent of his cases.

Sterility is common in these patients. According to Sharman and Rabau, 5 per cent of all sterile patients have genital tuberculosis, whereas the incidence of sterility in patients with pelvic tuberculosis is as high as 78 to 80 per cent.

Leucorrhea is present as in any other salpingitis. Ascites may be encountered in cases of tuberculous peritonitis. A low grade temperature is frequently present, although in cases of tubo-ovarian abscesses, it may be high. On the other hand, there may be no fever with the pelvic tuberculosis. The incidence of pelvic tuberculosis without fever is fairly large.

Diagnosis and Differential Diagnosis

From a diagnostic point of view, a careful pelvic examination following a thorough history is important. Whenever a patient presents complaints of pain, menstrual irregularities, and sterility, pelvic tuberculosis should be suspected, especially if there is any previous history of tuberculosis in the patient or her immediate contacts. It is well to remember that in many cases of pelvic tuberculosis, lapse of time between the appearance of extragenital lesion and the first manifestation of genital localization is over ten years. In Murray's series the average course of the disease was two years two months for tuberculous salpingitis; eleven months eight days for tuberculous endometritis; and five months twenty-six days for tuberculous cervicitis.

Tuberculous salpingitis should always be considered when diagnosis of salpingitis is made in a female with an intact hymen. Most

cases of vaginal tuberculosis occur in youngsters below 10 years of age. Apparently, as pointed out by Novak, this is due to high resistance of mature vaginal mucosa, which is more like skin than mucous membrane.

A white cell count below 10,000 is commonly found in tuberculous salpingitis except in cases where a tubo-ovarian abscess is present. Moderate leucocytosis is usually present during the acute attack of gonococcal tubal disease, while with an inactive Neisserian residue the white blood count is usually normal. With acute streptococcal infections, leucocytosis is usually higher than in gonococcal infections. Appreciable anemia is present in the majority of cases of tuberculous salpingitis while gonococcal salpingitis is not usually causative of anemia.

The majority of authors agree that only three out of a variety of methods used for the diagnosis of pelvic tuberculosis are of practical value. These are endometrial biopsies, cultures of the menstrual and intermenstrual discharge specific for Mycobacterium tuberculosis with the guinea pig inoculations, and hysterosalpingographies.

In a large series by Wood from Brazil, 85 per cent of his cases were diagnosed by curettage; 55 per cent through guinea pig inoculations; while when cultures were made, only 41.6 per cent were positive for Mycobacterium tuberculosis and in 37.5 per cent the Koch bacillus was found in the smears.

A dilatation and curettage aids considerably in the diagnosis of pelvic tuberculosis and should be done in all cases of sterility or menstrual irregularities. The best time to do this procedure is about five days before the menses is expected when the endometrium is thicker and the lesion more evident. It should not be done in cases of acute or subacute salpingitis. While a dilatation and curettage is a valuable aid, it also has its disadvantages. It is not entirely harmless. The results, especially the negative ones, are not always reliable. It is valueless in cases of tuberculous salpingitis when the endometrium is not involved.

Cultures of menstrual and intermenstrual discharges have the advantage that they can be repeated indefinitely. This method is preferred by some gynecologists such as Halbrecht from Israel. Although in his series only nine cases gave positive cultures, while endometrial biopsies were positive in sixty-two cases. Murray obtained good results by inoculating rabbits with normal saline containing endometrium removed by currettage.

Hysterosalpingographies help only in the diagnosis of endosalpingitic tuberculosis. The greatest contribution to this method of diagnosis has been made by Magnusson and Ko Chi Sun. Quoting Magnusson, "finely jagged and ragged contours with small lumen defects and sometimes with abscesses and fistula-like dilatations of the tubal lumen constitute the x-ray signs of tuberculosis." Quoting Ko Chi Sun, "The shadows show defective, non-hemogenous filling of the contrast medium; the tubes appear like thin stiff wires with irregular sacculation toward the fimbria; there is no free contrast medium in the peritoneal cavity." Whenever a salpingitis does not respond to ten days' treatment with antibiotics exclusive of streptomycin it is probably a tuberculous salpingitis. In some instances pain and temperature will respond but pelvic findings will remain the same.

Pain in tuberculous salpingitis is not as severe as in gonococcal infections which are frequently accompanied by cervicitis, bartholinitis, or infection of the Skene's glands. Also, in gonococcal or streptococcal infection, a temperature of 101 degrees is not unusual. However, these two forms of salpingitis, as mentioned before, respond readily to chemo-antibiotic therapy and are not seen as frequently as they were fifteen years ago.

Tuberculosis of the cervix, which is rare and which, clinically, may be mistaken for cancer, can be diagnosed by biopsy.

In the so-called "frozen pelvis," an endometrial biopsy will rule out cancer. In those cases where a few nodules are found in the culdesac and along the sacro-uterine ligaments, the differential diagnosis with endometriosis must be made. This is not too difficult if we remember that in endometriosis the pain usually decreases for a few days following menses and that this condition can be improved by preventing ovulation

through the use of male or female hormones.

Diagnosis is often not made until the patient is on the operating table. Then, in order to perform the proper procedure, there are several different conditions to look for in differentiating between pelvic tuberculosis and other pelvic diseases:

1. The fimbriated ends of the tubes are usually open in tuberculous salpingitis, while they are closed and inverted in gonococcal salpingitis.

2. The ovarian involvement is usually only a peri-oophoritis in pelvic tuberculosis.

3. The adhesions are more severe in tuberculosis and endometriosis than in other salpingites.

4. The serosa of the tubes, bowels, and pelvis should be carefully examined for the presence of tubercules.

5. Straw-colored fluid in the peritoneal cavity is diagnostic of tuberculosis.

Treatment

During the last few years great strides have been made in treatment of pelvic tuberculosis due to the introduction of streptomycin. Repeated reports in the literature have shown advantages and excellent results obtained through judicious use of this drug. Sered, Falls and Keettel in this country and Leroux in France have used this drug with good results, particularly in tuberculosis of the cervix, endometrium, and vulva. In those cases diagnosed as tuberculosis, treatment with ½ to 1 gram of streptomycin daily should be instituted at once. This therapy should continue for forty-five to ninety days. Many cases of vulvar, vaginal, cervical and endometrial tuberculosis have been reported as cured from the clinicopathologic viewpoint. However, it remains for future reports to determine whether or not this is a permanent cure. When the diagnosis of tuberculous salpingitis or genito-peritoneal tuberculosis is made prior to surgery, streptomycin therapy is given for six to eight weeks prior to surgery and continued for two to three weeks following the laparotomy.

If tuberculosis is discovered at the time of surgery, the least that should be done is bilateral salpingectomy. Usually total hysterectomy and bilateral salpingectomy is advisable. Preservation of ovaries should be attempted in younger patients when we are sure they are not diseased. The cervix may be spared in cases where adhesions make its removal a difficult procedure. It has been noted that surgery is easier to perform when the patient has received streptomycin prior to laparotomy.

X-ray therapy for genital tuberculosis has been advocated by many gynecologists such as Schmitz, Campbell, Shanta and others. It was introduced by Bircher in 1908. It is indicated in cases where plastic and severe adhesions make surgery impossible, in cases with cachexia, in cases that refuse to have surgery, and in cases which are slight or benign. X-ray therapy should follow surgery when the exudate reappears soon after surgery and does not disappear within fourteen days, and in cases where symptoms return after surgery. The x-ray dosage is 5 - 50 E.S.D. repeated weekly for four exposures; usually it is given through two portal fields.

In cases where radical procedures are not feasible because of the patient's condition, a biopsy should be taken, abdomen closed, and x-ray with streptomycin therapy administered. Cases not recognized at time of surgery should not be reopened, but x-ray and streptomycin therapy should be instituted once the diagnosis has been made by the pathologist.

Pneumoperitoneum is also used in treatment of tubal-peritoneal tuberculosis, particularly in institutions where a culdoscopic examination is performed as an aid in diagnosis of pelvic diseases.

Conclusion

Any case of tuberculosis of the female genitalia should be kept under periodic observation for further evidence of the disease.

NEW EXHIBIT SHOWS HOW MEDICAL DOLLARS ARE SPENT

A new exhibit showing how the medical care dollar is distributed among physicians, hospitals, druggists, dentists and others is now available through the AMA's Bureau of Exhibits. "Where Your Medical Dollar Goes" features three-dimensional figures on a revolving pedestal. Available to State and County Medical Societies, this exhibit may be shown either in conjunction with such exhibits as "Health Today" and "Your Medical Care" or by itself.

COARCTATION OF THE AORTA*

THOMAS F. KEYES, M.D.
SALT LAKE CITY

We are living in an interesting age, historically and medically speaking. Medically speaking, cardiovascular surgery has advanced more in the last ten years than it has in the previous one hundred years. This has been due largely to advancements in thoracic surgery itself, to development of anesthesiology and training of anesthesiologists, to more frequent use of blood and blood substitutes and employment of antibiotics, and to increased interest in surgery of the heart and great vessels. In 1938 Gross ligated the first patent ductus. This stimulated interest in cardiovascular surgery. In 1944 Crafoord, of Sweden, operated successfully on the first case of coarctation of the aorta. The next year Gross in this country operated successfully on a similar case. This further stimulated interest in this field. In 1946 and 1947, Blalock and Taussig worked out an operation for relief of cyanosis in tetralogy of Fallot, by anastamosing a systematic artery such as the subclavian to the side of the pulmonary artery. A modification was later put forth by Potts of utilizing the aorta and anastomosing it with the pulmonary artery in a side-to-side manner, using a special clamp on the aorta which only partially occluded the vessel. More recently, attempts have been made surgically to relieve mitral stenosis by going in through the auricular appendix with the finger and dilating the opening of the stenotic valve. In cases where the valve is sclerotic to an extent that the finger will not fracture the commissures a valvulotome must be used. This operation has been popularized by Bailey and Harken. However, it is a revival of the work done in 1925 by Cutler, Levine, Beck, Graham, and Souttar. These men, with the exception of Souttar, attempted to relieve stenosis by punching out a section of the valve leaflets. They used a ventricular approach. However, this procedure produced an insufficiency which was as badly tolerated as stenosis. It was Souttar, however, who went in through the auricular appendix and used the finger to fracture the commissures and enlarge the opening, which is essentially the operation which is done today. Other workers used the ventricular approach.

Coarctation of the aorta consists of two types — the infantile and the adult. The infantile type is a diffuse narrowing of the aorta beginning at the point where the subclavian is given off down to about the site where the ductus arteriosus comes off. It is often accompanied by other abnormalities of the heart which preclude surgical treatment. The adult type is that which we usually speak of as coarctation. It is a localized constriction of the aorta at or near the site where the patent ductus is given off. The etiology is not known. However, there is a theory called the Skodaic theory which postulates that after birth the process of obliteration of the ductus continues on into the wall of the aorta resulting in stenosis. However, there have been cases of the adult type in which the ductus has been patent, which more or less refutes this theory.

Incidence

Gross states that the incidence of coarctation of the aorta is about one in three thousand routine postmortem examinations. Thus, it is not a common abnormality. There is a preponderance of males to the ratio of about four to one. The explanation of this has not been given but some try to bring in sex hormonal factors as a reason.

Pathological-Physiology

As a result of aortic stenosis a tremendous collateral circulation is developed between branches of the subclavian artery and the intercostals below the coarcted area. The collateral circulation falls into three headings:

1. Through the apex of the thoracic cage; here the inferior thyroid artery and the highest intercostal artery play a part.

2. Through the shoulder girdle; here the transverse scapular and tranverse cervical

*Presented before the Western Colorado Spring Clinics, Grand Junction, April 18, 1952.

arteries which go around posteriorly anastomose in the interscapular region with the intercostals and form large pulsating arteries which can be seen posteriorly, and if one listens with a stethoscope in the interscalpular region, one can hear a systolic bruit over these enlarged vessels.

3. Through the internal mammary artery; this vessel anastomoses with the deep epigastric artery and is by far one of the most important collateral vessels in this condition.

Clinical Findings

1. Cyanosis and clubbing of the fingers are absent. Usually the patients are quite muscular and well developed.

2. There is hypertension in the upper extremities and hypotension in the lower. Sometimes it is difficult to obtain the blood pressure in the lower extremities.

3. Pulsation of vessels of the lower extremities is sometimes diminished or absent. It is important, therefore, to palpate the femoral artery and arteries of the lower extremities and abdominal aorta when one is suspicious about this condition.

Hypertension in this condition may resemble essential hypertension. Therefore, it is important in any case of hypertension in a young individual to palpate the femoral artery and if it is diminished or absent one should think about this condition because cases of coarctation in which the latter was not recognized have been diagnosed as essential hypertension and sympathectomies have been done.

4. Abnormal pulsations in the interscapular region and systolic bruit which were mentioned previously.

5. Difficulty in healing of wounds of the lower extremities. This is due to diminished blood supply to the lower part of the body.

Diagnosis is established from clinical findings above mentioned, from x-ray of the chest, and from angiocardiography. X-ray of the chest may show notching of ribs. This is due to enlarged tortuous intercostal arteries. Second, the aortic nob may not be as apparent as usual or may be absent altogether. Rib-notching will usually not be present until about the time of puberty. It is not apparent in young children. Angiocardiography, while not essential for diagnosis, is important from the surgeon's standpoint to know the length and location of the stenosis so he may decide upon its operability. There are three methods of performing angiocardiography in order to diagnose this condition.

1. Cardiac catherization and injection of dye—diodrast 70 per cent through the cardiac catheter. The dye is not concentrated as well with this method as it is with the two methods to be described.

2. Injection of dye through needle in carotid artery. This needle is a long one which is placed into the carotid artery and extends down into the aorta. It must be in the aortic stream so that when the dye is injected it is not disseminated into the cerebral circulation. This method gives satisfactory angiographs but requires experience for the needle injection.

3. The use of a catheter in the radial artery or a branch of the radial artery in a retrograde manner so that it is placed either into the ascending or descending aorta. If the catheter is placed into the right radial artery it will go into the ascending aorta. If it is placed into the left radial artery or branch thereof it will go into the descending aorta just above the coarctation (Muller). Use of either one of the radial arteries will give correct visualization of the aortic stenosis when the dye is injected.

Complications in untreated cases consist of:

1. Cerebral accidents. This is related to the hypertension and is determined by its extent.

2. Rupture of the aorta. This is a real danger; it may occur proximal to the stenosis but has been reported distal to it. It may occur in the ascending aorta due to thinning out of its wall.

3. Cardiac failure. It has been stated that 75 per cent of the patients who died before the age of 40 have died of cardiac failure.

4. Subacute and acute bacterial endocarditis is another complication which may occur.

Treatment

Treatment has been surgical since Crafoord of Sweden performed the first successful operation in 1944. Prior to that, nothing was done. There are three methods of surgical treatment:

1. Resection of the stenotic area and end-to-end anastomosis of the aorta. This is by far the best method and gives superior results.

2. Use of the subclavian artery, which is brought down and anastomosed to the distal end of the aorta after the stenosis has been resected. This method is not too satisfactory because in using the subclavian artery many collateral vessels must be sacrificed and the good that is obtained with the anastomosis may be negated by sacrifice of the collaterals.

3. Resection of the stenosis and use of an arterial graft. This method is used where a longer than usual stenosis is present or where, after the stenosis is resected, bringing the aorta together cannot be done satisfactorily because of tension. This method has been used by Gross who worked out the method of using arterial grafts.

Results

Gross (Circulation, Vol. 1, No. 1, January, 1950) reported 100 cases of coarctation of the aorta. Of these, in nine cases only exploration was done. This was probably due to the fact that there was a long stenosis present and it occurred before the time that arterial grafts were available. The rest of the cases were operated upon and a resection with end-to-end anastomosis was done with the exception of two cases where the subclavian artery was brought down and six cases where arterial grafts were used. By and large, resection with end-to-end to anastomosis has given the best results. There were eleven deaths out of these one hundred cases, which is not considerable considering the gravity of the surgery. One death was due to what Gross thought was too rapid removal of clamps and rush of blood to the lower extremities with pooling of blood therein. One death was due to cardiac arrest following use of cyclopropane and Gross believes that cyclopropane should not be used for a long procedure. Another death was due to a ruptured intercostal artery.

Summary

Now that surgery offers a cure for coarctation of the aorta, attempts to make the diagnosis should be made. Diagnosis is not difficult if one remembers the occurrence of hypertension in upper extremities and hypotension in lower extremities, and if one carefully palpates the femoral arteries and arteries of the lower extremities in all cases of hypertension. Results of surgical treatment are good. Mortality is not high when one considers the gravity of the operation.

A.M.A. MEETING TO BE AIRED ON RADIO AND TV

Physicians who cannot attend the A.M.A.'s 102nd annual convention can see and hear highlights of the meeting via radio and television.

The Presidential inaugural ceremony will be broacast coast-to-coast on Wednesday, June 3. Although the inauguration of President-elect Edward J. McCormick will be held Tuesday, the coronation of Queen Elizabeth II of England on the same day—which will be widely covered by radio and television—has made it necessary to rebroadcast the proceedings on Wednesday evening.

In television areas, the half-hour "March of Medicine" program, originating at the Scientific Exhibit in New York's Grand Central Palace, will be presented either Thursday or Friday evening. This television coverage will be sponsored by Smith, Kline and French, Philadelphia pharmaceutical firm.

Further information on these two programs will be available in the near future.

EUROPEAN M.D. CONTRIBUTES TO A.M.E.F.

A European-educated physician now residing in Madera, California, believes that physicians should support American medical schools. Although he owes no allegiance to any school in this country, Dr. Thomas Klein sent in a donation to the American Medical Education Foundation. His action sets an example for graduates of American medical colleges. In less than three months of this year, the Foundation has received in excess of $657,000 from more than 7,000 contributors towards its 1953 goal of two million dollars.

NON-OSTEOGENIC FIBROMA OF BONE

W. C. HUYLER, M.D., and FRED H. HARTSHORN, M.D.
DENVER

Non-osteogenic fibroma of bone was first described by Jaffe and Lichtenstein in 1942. It is a benign lesion, often an asymptomatic incidental finding and is curable by adequate surgery. Its chief importance is that it may be mistaken for fibrosarcoma. The diagnosis can be suggested from the roentgenogram but final diagnosis must be determined by biopsy. The original report on this lesion by Jaffe and Lichtenstein is so painstaking and thorough that nothing can be added to it today. They describe the lesion as a benign marrow-connective tissue tumor which does not undergo osseous metaplasia. All reported lesions have been in the distal or proximal third of a long bone, generally of the lower limb, with several centimeters of normal bone between the lesion and the epiphyseal plate. Grossly the lesion is a single focus or a group of foci of yellowish or brownish fibrous tissue. Histologically it is made up of whorled bundles of spindle-shaped connective tissue cells with some small multinuclear giant cells and in some lesions collections of foam cells. The age of patient at time of discovery of the lesion has varied from 6 to 21 years. Usually the finding is an incidental one but occasionally there is a history of trauma or pain or both. Probably the trauma merely calls attention to the lesion.

Previously, it seems, this lesion has been interpreted as a variant of giant cell tumor or of osteitis fibrosa or as giant cell variant of bone cyst. It has probably also been mistaken for xanthoma or xantho-granuloma. It is not to be confused with ossifying fibroma of bone. Geschickter and Copeland in their excellent book, "Tumors of Bone," 1936, do not mention non-osteogenic fibroma, but in an article entitled "Benign Tumors of Bone" in Surgery, Gynecology and Obstetrics, Volume 90, 1950, Copeland under the heading "Fibroma" says, "Benign non-osteogenic fibroma as an inclusion in bone is occasionally seen." This, he says, is a subcortical lesion with circumscribed rarefactions suggesting polycystic changes, found in the shafts of long bones.

In the roentgenogram this tumor appears as a cystic lesion originating in the cortex and expanding into the medullary cavity. It is eccentric when small but may extend across the bone and may even expand and thin the cortex. It extends along the long axis of the bone. It is subdivided or loculated with partitions that may be quite dense and is outlined by an encapsulating shell on its inner surface within the medullary cavity. It is to be differentiated from atypical bone cyst, fibrous dysplasia, enchondroma, myxoma, the chondro-myxoid fibroma described also by Jaffe and Lichtenstein and especially from fibrosarcoma.

Non-osteogenic fibroma is curable by thorough curettement or in the case of the smaller long bones by subperiosteal resection. There is no reason to believe that this lesion is amenable to radiotherapy.

We would like to add another case to the literature. This was an incidental finding in a case of fracture of the patella in a 10-year-old white girl. X-ray done at the time of the injury, showed the tumor consisting

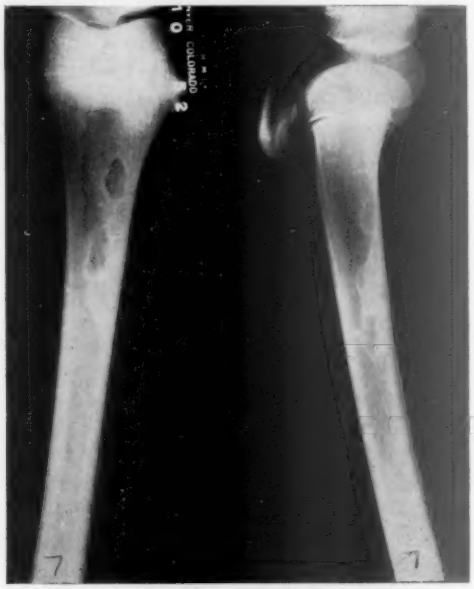

Fig. 1. X-ray taken incidental to fracture of patella.

of three irregularly shaped, closely joined cystic areas, arising in the postero-medial cortex of the lower third of the femur, extending along the long axis of the shaft with several centimeters of normal bone between the lesion and the epiphyseal plate. The lesion was relatively small, did not extend across the medullary cavity and did not cause expansion of the bone. On the medullary side it was outlined by an encapsulating bony shell.

No treatment was instituted at this time. Seven months later x-ray showed no change. The next year an Osgood-Schlatter's disease developed on the opposite side and in connection with this an x-ray study was made of both knees. These films compared with the previous films showed an increase in size and some change in shape of the distal portion of the lesion. A diagnosis of non-osteogenic fibroma was suggested from the roentgenogram and was confirmed by biopsy. The lesion with the entire involved section of bone measuring 7 by 1.5 by 1.5 cm. was resected. In this section of bone there were found three cystic areas containing a soft yellowish material which separated easily from the bone. The walls were dense bony tissue about 3 mm. in thickness. Sections from the yellowish soft material showed it to be well differentiated fibrous tissue growing in bundles and producing collagen. Groups of foam cells and some deposits of hemosiderin pigment were found.

There has been no recurrence.

A MENTAL HEALTH PROGRAM FOR WYOMING*

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CHEYENNE, WYOMING

Mental health is more and more becoming considered an important part of general health. Hippocrates, the father of medicine, differentiated between emotional and organic illnesses. However, these concepts seemingly were lost for centuries and again reappeared in the field of medicine too few years ago. The past concept of psychiatric illness included for the most part only the incarceration of the severely mentally ill and ineffectual attempts at treatment thereof. The present focus, however, is on hygiene, prevention, early diagnosis, and early treatment of psychiatric illness. Too often undesirable attitudes toward psychiatric illness creep into even modern medicine. How often have we not heard the words "psycho" and "hysteria" with accompanying derogatory remarks.

We might wonder at need for a mental health program in the State of Wyoming. Statistics can be boring and tedious so perhaps it is sufficient to say that in the course of nine months' experience in psychiatry in Wyoming, I have met with, either directly or indirectly, approximately 500 problems deserving psychiatric attention. This, at least, is sufficiently convincing to me that a need exists in this state for a state mental health program.

Wyoming is not the last of the forty-eight states to have a mental health program, but it is the last state in the so-called Rocky Mountain area to institute such a program. To emphasize the need for a program it might be stated that Wyoming is the forty-seventh state in the Union to have a program directed strictly along the lines of mental hygiene and mental health. This message is directed toward the men in medicine in Wyoming, because only through your cooperation can such a program exist and assume its place in the total medical service of the state.

The demand for a mental health program existed in our state twenty years ago. Doctors of the profession, state, and local agencies spoke of the need for such a program. A partial mental health program has existed in the state for approximately two years. Psychiatric consultation has been obtained for the Public Health Department and the Public Welfare Department from sources in Denver. However, the program as it exists today was instituted last September, 1951. The program was organized under the

*Presented before the 49th annual meeting of the Wyoming State Medical Society, Lander, June 5-7, 1952. The author is Psychiatric Consultant, Wyoming State Department of Public Health.

direction of Franklin D. Yoder, M.D., Director, State Department of Public Health, and placed under the Division of Crippled Children and Maternal and Child Health of which Dr. Albert R. Taylor is the head. My services as psychiatric consultant to the State Department of Health for two days per week are paid for by the State Health Department. Funds for support of the mental health program come partially from taxation of the people of the State of Wyoming and partially through the Federal Security Agency through provisions of the National Mental Health Act. Wyoming with its problems of space, geography, and distribution of population, must have health programs which vary somewhat from the concept of total community self-sufficiency in order to reach its people.

For the people to have any kind of psychiatric service either they must go to where the psychiatric service is available or else psychiatric service must go to the people. To wait until such time as each community could have an individual practitioner of psychiatry would mean an indefinite postponement of psychiatric service within the state. Assuming that psychiatric service is essential to all people, the state mental health program makes possible at least a partial psychiatric service at this time rather than waiting indefinitely for such a service to exist in the respective communities.

Perhaps some description of the mechanics and administration of the present program is in order. Administratively the mental health program cannot exist or stand alone at this point. It depends upon already existing state agencies, namely the State Public Health and the State Public Welfare Departments. These two agencies primarily were selected for administrative purposes because they are represented both at the Capitol and locally in each county. Included in the agencies mentioned is a doctor from each county, the county health officer. Any correspondence concerning the administration of the mental health program has been sent to the county health officers within the profession and their help and cooperation solicited in terms of making this program a success. Through the county health officer each practicing physician can obtain a limited psychiatric consultative service in his community.

During the first year of the program, 1952, there was carried out a state-wide dissemination of psychiatric, educational, and preventive information. In community meetings throughout the state the possibilities and limitations of the program were discussed. The program is directed primarily toward the people through the medical profession and state agencies. The state agencies included are Public Health, Public Welfare, Public Education and other allied agencies. During the course of 1952 a visit by myself and some representative of the Public Health Department was made to all county seats. Some larger communities were visited more than once. This decision has been based upon accessibility throughout the year from Cheyenne by the way of public transportation and also by the size of the community involved. Each visit to a new community throughout the state includes consultative service to doctors, public health, public welfare and Department of Education representatives. Second, included in each community visit is an open public meeting to which everyone in that community is invited. At this open public meeting a description of the mental health program is given. Third, counselling service with doctors and members of various agencies concerning professional and community problems is also offered. Fourth, arrangement has been made with the Board of Charities and Reform to visit the various charities and reform institutions about the state. When community meetings are held where these institutions are located an attempt is being made to give a psychiatric consultative service to these various institutions in addition to providing the Board of Charities and Reform with psychiatric opinion concerning the institution as a whole. Fifth, service in the form of talks, discussions and psychiatric films are available to doctors, local civic and community groups. Arrangement for any of the services mentioned can be made through prior arrangement with the county health medical officer, the public

health nurse, or the public welfare director in the respective counties.

Having at first no particular plan or course of action, the program and the meetings in the respective communities gradually undergo change. A typical community meeting, however, might well include the following: from 8:00 to 10:00, two cases or two patients would be seen in psychiatric consultation, to include the parents, family members, and any agency personnel who are interested in the particular problem. From 10:00 to 12:00, there is usually a discussion with public health, public welfare, public education, the clergy and any other individuals who are interested in community psychiatric problems. Frequently at noon there is a talk to a local luncheon group. From 1:00 to 3:30 the community meeting is held, during which there is discussion of the state mental health program. This is usually followed by a film on a psychiatric subject and a discussion of the film by the psychiatric consultant and within the group. The remainder of the day is given over to visits to the charities and reform institutions or to other consultations, whatever the need may be.

You might ask what are the goals of the state mental health program. Ideally, as with all of medicine, the goal is the eradication of all human disease. However, as with the whole of medicine, a mental health program more practically might well have as a goal the prevention, early detection, and treatment of psychiatric illness within the limits of the mental health program.

You might well also be asking what is the future of the state mental health program. Actually in many ways it is yet undetermined. The need for services over and above that which exists now could well bring into existence full-time personnel in a program who could operate treatment mental hygiene clinics more along the usual concepts of a mental hygiene clinic. Actually in the first year of the program the emphasis will be away from treatment by necessity and will be focused upon laying the groundwork for future treatment clinics and more direct service. It has been found absolutely necessary that first the concept of mental health must be presented to the public and misinformation, prejudice, fear, and stigma surrounding mental illness be brought out in the open and discussed. Thus mental illness can gradually be thought of as are other illnesses and consultation and early treatment sought without fear or risk of community disfavor. In place of the present program, clinics could be set up on a weekly, bi-weekly, or monthly basis, depending upon the number established. Again it is emphasized that the focus will be on the introduction and laying the groundwork for such future direct service in the first year.

A year ago at the 1951 annual session, members of the medical profession of Wyoming gave approval for the existence of the present program. This report is presented this year so as to acquaint you with the progress made so far in the mental health program and also to acquaint you with the means of obtaining service to you as practitioners from the mental health program. Those in the program have appreciated your approval and cooperation during the past nine months. Continued support and utilization of the mental health program is solicited so as to make it a success.

FIRST INTERNATIONAL CONVENTION OF X-RAY TECHNICIANS

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Two Memorial Lecturers: Canadian—Welch Memorial Lecture, by E A. Petrie, M.D., Director, Department of Radiology, St. Joseph's Hospital, St. John, New Brunswick, Canada. American—Jerman Memorial Lecture, by Russell H. Morgan, M.D., Professor of Radiology, The Johns Hopkins University, Baltimore, Maryland.

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Case Report

PHEOCHROMOCYTOMA

GEORGE B. KENT, M.D., CARL J. JOSEPHSON, M.D., and ROBERT W. VIEHE, M.D.
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We have encountered recently a functioning tumor of the adrenal medulla in a patient who has been observed by one of us (G. B. K.) for fourteen years.

CASE REPORT

W. G., aged 40, white, male, airplane mechanic, presented himself to the office of his personal physician in September, 1937, for routine examination. His only complaint at that time was in reference to a long-standing gonorrheal urethral discharge, dating back to 1918. The physical examination revealed a healthy man of 180 pounds, whose blood pressure was 120 over 80. The right lobe of the thyroid gland was easily palpable, soft, smooth, and contained no nodules. The prostate was soft and enlarged. The remainder of the physical examination was within normal limits. Urinalysis, normal; urethral smear, negative. A course of prostatic massage was carried out and the patient was dismised with no morning secretion and no complaints.

He appeared for a civil service examination in 1942. The examination was done and reported within normal limits. In 1948 he was seen for "stomach trouble," which consisted of irregular distress for four years and daily distress for the previous year. He would arise, vomit thick mucus, eat a fair breakfast, and be symptom-free until noon when he would have nausea commencing about one hour after eating. This nausea continued until the evening meal, when it disappeared for an hour or two, only to be present again in the evening and to awaken him from sleep. The type of food had no effect, though he tried to stay away from fatty and greasy foods. There was no history of gallstone colic, hematemesis, melena, or jaundice. There had been a weight loss of seventeen pounds in the previous year. He stated he sweated a lot and was always too hot. No goiter was noted and no cardiac palpitation felt. He had a complete gastrointestinal series, a gallbladder study and gastroscopic examination, all of which were reported as negative. The stomach acids were "low." The physical examination revealed a sick-appearing man of 51, whose blood pressure was 200/100; pulse, 120 with a fine tremor of the fingers grade one (on a basis of four, the most severe), but with no quadriceps muscle group weakness. Thyroid examination was negative, as was the heart, lungs, abdomen, genitalia, and rectum. Complete blood count and urinalysis were within normal limits. The basal metabolic rate was plus 30. No definite diagnosis was made, but he was placed on ten drops of Lugol's solution three times daily. On this therapy he gained weight and felt better. The blood pressure dropped to 165/115, the pulse to 80. A diagnosis of exophthalmic goiter was made, and a partial thyroidectomy was done in May, 1948. The surgeon stated in his report that the gland worked like a colloid goiter, but that it probably would show hyperplasia in the microscopic sections. The pathology report stated in part: "involution, thyroid, histopathology inconclusive but abnormal with the over-all picture being compatible with diffuse hyperplasia and involution secondary to Lugol's therapy."

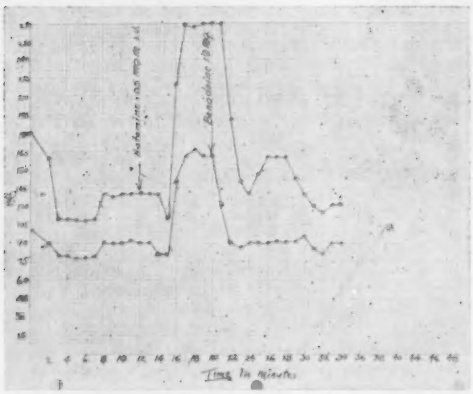
This surgery seemed to help the patient. He had less morning nausea, his blood pressure was recorded at 125/85 two months later. He presented some hypothyroid symptoms in another month and was placed on thyroid extract. He remained on this medication for several months, though vomiting persisted in the morning under antispasmodic medication. Constipation increased and the patient was not well. Gastric analysis was done in June, 1949, and revealed normal gastric acids in the fifteen- and thirty-minute specimens and only seven units total and three units free in the forty-five-minute specimen. Gallbladder x-ray revealed a functioning gallbladder, but it was filled with non-opaque stones. Surgical exploration was recommended, but refused until May, 1950. Laboratory data at the time of hospitalization was as follows: Red blood count, 5,260,000; hemoglobin, 14.2 grams; white blood count, 8,900, normal differential; urine, specific gravity 1.012 with one plus albumin. The gallbladder was packed with over 300 faceted calculi. The appendix was removed and the pathologist observed acute inflammation in the appendix. The sigmoid and the descending portion of the colon were thin and dilated so that the large bowel was over six centimeters in diameter. This narrowed down to a normal pelvic rectum rather abruptly at the peritoneal reflection, but thorough exploration at this site revealed no evidence of organic obstruction.

The postoperative course was "stormy." There were numerous episodes of cold sweats with blue-mottled cold skin. The blood pressure during this hospitalization was 180/120 on admission, dropping to 164/110 postoperatively. On the tenth postoperative day he had a "gas" attack with nausea, retching, flatus, cold sweat, and a large amount of bloody serous drainage from the wound. There was a wound separation of all layers in two places for a distance of two and a half centimeters. This was held with adhesive. Convalescence progressed satisfactorily and he was discharged on the sixteenth postoperative day, with a strong granulating wound.

This patient continued to do poorly; he had frequent morning nausea and vomiting, excess intestinal gas with cramping abdominal pain, so-called "gas attacks," headaches, and a twenty-pound weight loss. Seven months after the cholecystectomy this patient had a "fit" at 10 p.m. His wife described this as starting with a drooling from the mouth, a blank stare, excess sweating, progressing to nausea, numbness of the left hand, some agitation with threats of bodily harm to her. This lasted about five minutes and then he reverted to his usual mental and physical state. Neurologic examination was requested and done two days later. The patient stated he had a typical "gas attack" as he was waiting for the examination. The neurologist reported: "While undressing for the examination the patient began to belch frequently. Later I observed considerable cyanosis of the lips and extremities and the man seemed somewhat dyspneic. A neurologic examination was essentially negative. The heart was enlarged and fibrillating and the blood pressure was 264/142." We saw this patient ten minutes later and found him as we had observed him so many times in the past,

completely at ease, with a regular pulse of 82 and a blood pressure of 120/80.

The patient was hospitalized January 1, 1951, for further study. No significant change was noted in the physical examination. The eye grounds were not remarkable. On the second hospital day the blood pressure was 220/110 and premature ventricular contractions were noted. An electrocardiogram taken shortly after this observation showed sinus rhythm with evidence of left ventricular hypertrophy and strain. Urine examination—specific gravity, 1.022; trace of albumin and sugar, with a negative sediment. Red blood count, 4,430,000; hemoglobin, 12.6 grams; white blood count, 7,800 with 78 per cent polys, 20 per cent lymphocytes, and 2 per cent eosinophiles. Blood sugar determinations made during "gas attacks" on different days were 199 mg. per cent and 183 mg. per cent. A five-hour glucose



Graph I: W.G. blood pressure response to histamine and benzodioxane intravenously.

tolerance test: fasting, 108 mg. per cent; one hour, 199 mg. per cent; two hours, 108 mg. per cent; three hours, 69 mg. per cent; four hours, 74 mg. per cent; five hours, 102 mg. per cent. Non-protein nitrogen, 48 mg. per cent. Serum albumin, 4.08 mg. per cent; serum globulin, 2.19 mg. per cent. The basal metabolic rate was plus four. The Kahn serologic test for syphilis was negative. Pressure and massage of the adrenal areas failed to affect the blood pressure dramatically. Massage on the right caused no change. Massage on the left caused the blood pressure to rise from 106/78 to 150/102.

Specific studies were then carried out. Benzodioxane was given in the amount calculated according to height and weight (10 mg. benzodioxane per square meter body surface). A histamine test was done with 0.05 mg. histamine diphosphate intravenously, incorporating the effect of the benzodioxane after the administration of histamine as shown in Graph 1.

An intravenous pyelogram was interpreted as showing left nephroptosis but without any lateral displacement of the kidney. These films were compared with previous retrograde pyelograms which had been taken a year prior to this admission which had shown lateral displacement of the left kidney. Perirenal air injection was done on the left. The injection was discontinued because of a rapid fall in blood pressure to 85 mm. systolic. These films were interpreted by the roentgenologist as outlining a left adrenal gland 70x25 mm. which compares with the upper limits of normal size as given by Morris' Human Anatomy text (See Fig. 1). Gas in the intestines greatly obscured these studies and was not relieved by three enemas and subcutaneous prostigmine. This gas was so marked it was thought to represent an altered physiological process in the intestinal tract.

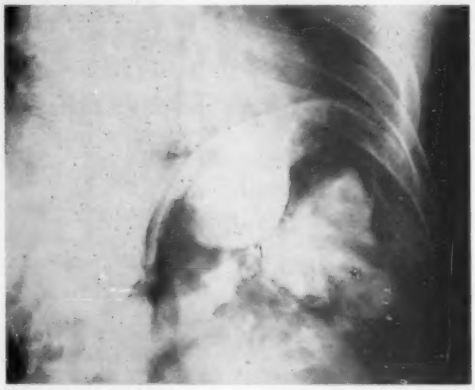


Fig. 1. Left perirenal air injection showing left adrenal gland. The gland was entirely replaced by tumor tissue.

After summation of all available evidence, a pheochromocytoma was diagnosed and it was suspected that it was present on the left side, either in or arising from the left adrenal gland. Five hundred cubic centimeters of compatible whole blood were administered slowly; digitalization and cardiac regimen was continued, including mercurial diuretics and a low sodium diet. Both benzodioxane and adrenal cortical extract were available for use at surgery in addition to the usual operating room medications. The patient was given basal rectal analgesia (Avertin) before moving him to the operating room. Pentothal sodium with curare plus oxygen-ether was used for anesthesia. Intravenous fluid was started in two veins through large gauge needles. Abdominal incision was used because of the indefinite preoperative localization of the tumor, and because we wished to explore the entire abdomen, the pancreas, the perivertebral spaces and the area of the bifurcation of the aorta (Space of Zuckerkrandl). Our medical consultant (C.J.J.) was present through the entire procedure to follow the response to manipulation of the tumor and to direct the supportive therapy. A total of 36 mgms. of benzodioxane was used intravenously during the height of the blood pressure response, and a total of 5 mgms. of neosynephrine was used for blood pressure support after removal of the tumor.

Operative procedure: A long left rectus incision was made. Exploration of the abdominal cavity revealed numerous ancient adhesions about the gallbladder area to the anterior abdominal wall. The omentum was densely adherent to the abdominal wall. This was released. Gentle palpation revealed the stomach to be normal. The esophageal hiatus, spleen, and liver were normal. The gastrocolic omentum was then opened and the pancreas viewed. There were several large tortuous accessory splenic veins encountered. Exploration of the left renal area revealed a tumor mass 10x8x8 cm. which was thought to be kidney on initial palpation. The mass was pale with many areas of yellow mottling on the

surface. It was removed by sharp and blunt dissection. Exploration of the area revealed no additional tumor mass. No other tumor masses were palpated or seen in the abdominal cavity.

The postoperative course was precarious for forty-eight hours but satisfactory following that period. Great care was used to prevent overloading the circulation. One is torn between the desire to correct the prolonged shock and the fear of cardiac overload. We were cautious and were gratified to see the gradual improvement, but did have many anxious moments when the patient had a persistent blood presure depression varying from 58/40 to 86/60 for the first twenty-four hours. The pulse remained below 100 and was regular. Cheyne-Stokes respiration was noted for varying intervals during the

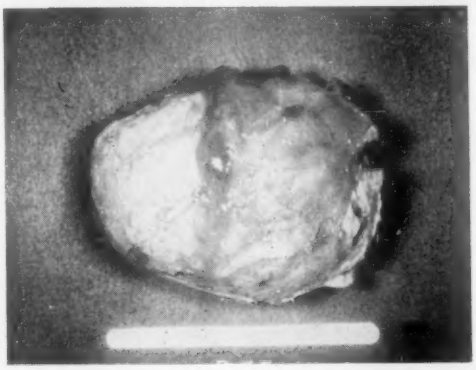


Fig. 2. Gross specimen, unopened.

first twenty-four hours after surgery. The patient was kept in the head-down position, given continuous oxygen, and minute amounts of intravenous neosynephrine, adrenal cortical extract, and desoxycorticosterone acetate, plus continuous slow drip of dextrose in water and a slow transfusion of whole blood. The blood pressure reached 110/66 after a gradual rise during the forty-eight hours following surgery and did not fall below that level again.

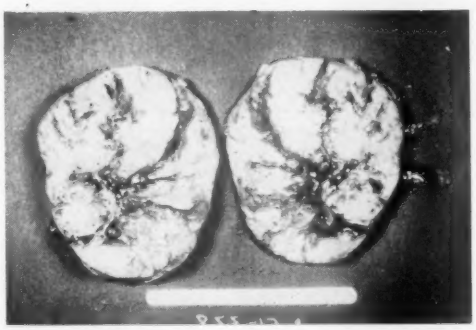


Fig. 3. Gross specimen, opened

The tumor was 10x8x8 cmcs. and weighed 278 grams (Figs. 2 and 3). Report of the pathologist: "Microscopically the tumor mass presents uniform large cells in aveolar pattern. There are small moderately hyperchromatic nuclei rarely presenting mitoses. There is abundant vesicular type cytoplasm. There are rather prominent areas of recent and old hemorrhage with cystic degeneration in parts. Cancerous change is not observed and pleomorphism is not a prominent factor. Sections fixed in chromate fixative (Zenker's Solution) present the characteristic yellow brown stain associated with chromaffin tumors. Diagnosis: Pheochromocytoma, left adrenal gland" (Fig. 4).

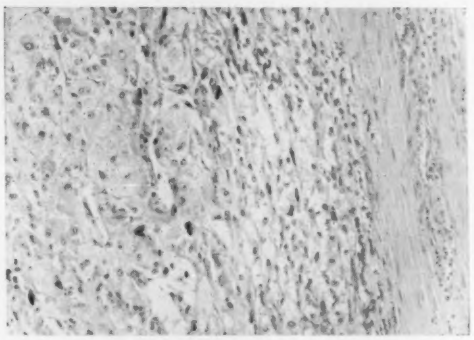


Fig. 4. Photomicrograph of pheochromocytoma, x440.

The patient left the hospital on the twelfth postoperative day and has made steady progress. He has been seen recently, seventeen months after removal of the pheochromocytoma, and complains of occasional constipation and of headache when straining at stool. There has been a noticeable increase in amount and quality of the hair on his head, and the patient volunteers that the sexual potency has increased since operation. There has been no recurrence of the morning nausea, epigastric fullness, "gas attacks," or mental unrest during this time. At the present time his blood pressure is 162/100. There are occasional hyalin casts in the urine, which has a specific gravity of 1.014, and is without sugar or albumin.

Summary

The case study of a 53-year-old man is presented, who had been troubled with vasomotor and gastrointestinal symptoms for over seven years and who had been under observation for fourteen years. A thyroidectomy and a cholecystectomy had been done previously without completely satisfactory results. He improved after each procedure but the presence of a pheochromocytoma was not suspected until a fortunate chain of events took place. Appropriate preoperative studies were carried out and these are described. The surgical procedure is described. We wish to submit this case report of the successful removal of a functioning tumor of the adrenal medulla for addition to the reported cases (207) and to the patients who have survived (92) removal of a pheochromocytoma.

COLORADO
State Health Department

CHILD DEATHS FROM MALIGNANT NEOPLASMS, COLORADO, 1949-1951*

One hundred of the total 1,062 deaths occurring in the period 1949-1951 among Colorado children aged 1 through 14 years were attributed to malignant neoplasms, including leukemias and Hodgkin's disease. For this age group, the average annual mortality rate from all causes was 106.1 deaths per 100,000 children, using the 1950 census for the mid-period population figure. For malignant neoplasms, the mortality rate was 10.0 deaths per 100,000 children in the age group.

Because of requests received from pediatricians and other physicians for detailed statistics on mortality from malignancies in childhood, the accompanying table was prepared to show the 100 child deaths from these causes, 1949-1951, according to primary site and three age groups between 1 and 15 years. In the three-year period there also were four infant deaths due to malignancies: lymphoma, one; monocytic leukemia, one; malignant neoplasm of the brain, one, and malignant neoplasm of the biliary passages or liver, one.

All of the statistics in this report are based upon annual mortality tabulations by the Records and Statistics Section of the Colorado State Department of Public Health, and refer to residence allocated deaths and principal cause, classified according to the four-digit code of the International Statistical Classification of Diseases, Injuries and Causes of Death, Sixth Revision of the International Lists of Diseases and Causes of Death, 1948.

Three recent references of interest in relation to statistics on mortality from cancers and leukemias in childhood follows:

Metropolitan Life Insurance Company, "Changing Problems in Child Health," Statistical Bulletin, Vol. 32, No. 3 (Mar.), 1951—Death rates from specified causes among white children 1 to 14 by sex, table, p. 5.

Metropolitan Life Insurance Company, "The Postwar Cancer Record," Statistical Bulletin, Vol. 32, No. 5 (May), 1951—Death rates from malignant neoplasms, white persons by sex and age periods, table 1, p. 8.

Tivey, Harold, M.D., "Prognosis for Survival in the Leukemias of Childhood, Review of the Literature and the Proposal of a Simple Method of Reporting Survival Data for These Diseases, Pediatrics, Vol. 10, No. 1 (July), 1952, pp. 48-59.—In the summary, p. 57, it is stated:

"From these analyses, the physician can expect that 50 per cent of the children with acute leukemia, given supportive therapy not including antibiotics, will die within a period of approximately four months after the onset of the first definitive symptoms. The remainder of his patients with leukemia will live considerably longer, about 10 per cent for as long as eleven months. He can expect the middle two-thirds of his patients to survive from approximately two to eight months."

*Prepared by Research and Reports Service, Colorado State Department of Public Health, Eleanor L. Richie, March, 1953.

Deaths from Malignant Neoplasms, Colorado Residents Aged 1-14 According to Primary Site* 1949-1951

Primary Site Group	Total 1-14	Age Group 1-4	5-9	10-14
All sites	100	49	28	23
Lymphatic and haematopoietic tissues	46	25	13	8
Lymphatic leukemia	21	11	4	6
Acute leukemia, unspecified type	8	4	4	....
Myeloid leukemia	5	2	2	1
Monocytic leukemia	3	2	....	1
Other and unspecified leukemia	3	2	1	....
Lymph nodes	2	2	....	....
Lymphoid tissue, exc. lymphosarcoma and reticulosarcoma	2	1	1	....
Lymphosarcoma	1	....	1	....
Hodgkin's disease	1	1	....	....
Brain and other central nervous system	27	14	7	6
Bone	7	....	4	3
Kidney	7	5	1	1
Digestive organs and peritoneum	4	1	1	2
Large intestine	2	....	....	2
Biliary passages or liver	1	1	....	....
Peritoneum	1	....	1	....
Thyroid gland and other endocrine glands	3	3	....	....
Respiratory system	2	....	1	1
Eye	1	1	....	....
Female genital organs	1	....	1	....
Melanoma of skin	1	....	....	1
Mouth	1	....	....	1

*Deaths from cancer as the principal cause, according to primary site group, as classified under the Sixth Revision of the International List of Causes of Death, allocated to Colorado as the place of usual residence shown on the death certificates, regardless of length of stay in the place of death.

Childhood constipation deserves treatment which gently restores normal peristaltic movements; drastic elimination cannot permanently correct the condition and may be harmful to the child.

ROLE OF METAMUCIL® IN ESTABLISHING PROPER BOWEL HABITS IN CHILDREN

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SEARLE Research in the Service of Medicine

Organization

COLORADO
State Medical Society

Obituaries

GEORGE C. SHIVERS

Dr. George C. Shivers, Treasurer of the Colorado State Medical Society, died April 11, 1953, at his home in Colorado Springs from coronary occlusion. He had not been ill, and the attack occurred in the late evening following a dinner party of family and friends.

Dr. Shivers had been Treasurer and a member of the Board of Trustees of the Colorado State Medical Society for five and one-half years, and had been active in both the El Paso County Medical Society and the State Society for many years. He was a native of Greenville, Mississippi, where he was born November 14, 1905, but had been brought to Colorado Springs as a child. He was a graduate of Colorado College, and obtained his M.D. from the University of Colorado School of Medicine in 1930. Following several years of postgraduate work in surgery, he specialized in that field for most of his professional life. He was a Fellow of the American College of Surgeons, and since 1936 had been Secretary of the American Goiter Association. He was also active in Colorado Springs civic affairs, had been several years a member and once President of the local Board of Education, active in the Kiwanis Club, the Scottish Rite Masonic orders, and the First Methodist Church. He was a former Chief of Staff of Memorial (Beth-El) Hospital and was also active on the staffs of Glockner-Penrose and St. Francis Hospitals.

Dr. Shivers is survived by his wife, Claudine; two daughters, Nancy Jane and Elizabeth Ann; his parents, Dr. and Mrs. M. O. Shivers, all of Colorado Springs; a brother, M. O. Shivers, of Denver, and a sister, Mrs. S. F. Beam of St. Louis, Missouri.

ALLER G. ELLIS

Dr. Aller G. Ellis, who had spent the last fifteen years in retirement in Colorado Springs, died at the age of 84 on February 19, 1953, in Plainfield, New Jersey, where he had recently moved.

Graduating from the Jefferson Medical College in 1900, he specialized in pathology and worked in this field at his alma mater for eighteen years. As a representative of the Rockefeller Foundation he was sent to Bangkok, Siam, in 1919, remaining there for two years.

On his return to this country he took up work in clinical and general pathology in Colorado Springs, but in 1923 was called back to Bangkok to aid in the reorganization of the medical school of Chulalongkron University. This mission he accomplished with such brilliant success that he was retained in his post for fifteen years and was finally, upon his retirement, made a Knight Commander of the Most Noble Order of the King of Siam.

Upon his return to this country he was awarded an honorary D.Sc. by Geneva College, where he had taken his B.S. in 1894. It was Dr. Ellis' love of mountains that led to his return to Colorado to spend his years of retirement.

DR. W. A. CAMPBELL ELECTED INTERIM TREASURER

Dr. William A. Campbell of Colorado Springs was elected interim Treasurer of the Colorado State Medical Society April 16, 1953, by the Board of Trustees of the Society acting under its emergency powers. Dr. Campbell will fill out the unexpired term of Dr. George C. Shivers, who died April 11. Dr. Shivers was serving his second three-year term as Treasurer of the Society when he died, and his term would have expired October 2, 1953.

Component Societies

LARIMER COUNTY

Dr. James Miles, Assistant Professor of Orthopedic Surgery at the University of Colorado School of Medicine, was guest speaker April 1, before the Larimer County Medical Society. He discussed fractures of the hip. At the same meeting the Society voted to make a contribution to the Nurse Recruitment Committee of Larimer County, which is endeavoring to interest high school girls in nursing careers. The Society also created a committee, chairmaned by Dr. Fred A. Humphrey, to represent the profession of the county in matters related to distribution of gamma globulin.

S. A. PATTERSON, Secretary.

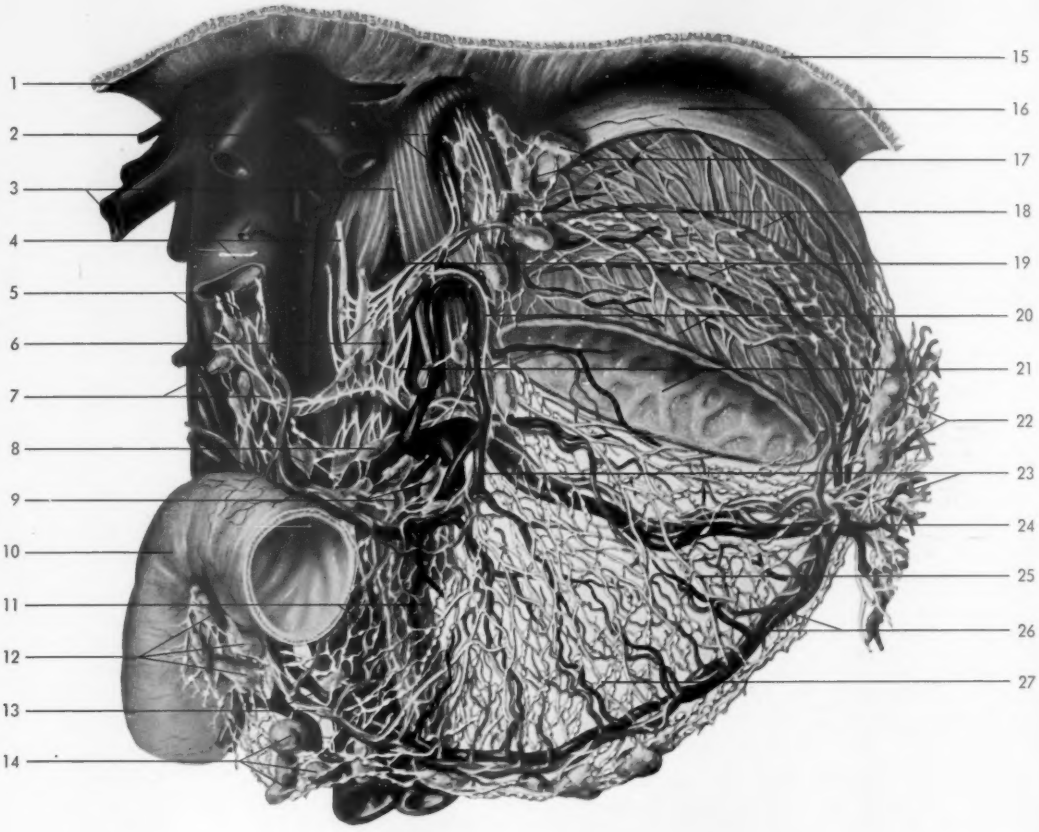
Auxiliary

DENVER

Thirty Auxiliary members gave a helping hand to the American Cancer Society on March 18, when they spent the day stuffing envelopes at the Society headquarters. Each worker brought her own sandwiches; coffee and cake were served at noon. Mrs. William A. Hines served as chairman pro tem in the absence of Mrs. Paul Clark, who had assembled the workers and made the arrangements.

The Denver County Auxiliary has announced the names of the winners of the essay contest sponsored locally in conjunction with the Ameri-

Anatomy *of the* Stomach



1 Middle and left hepatic veins

2 Right vagus nerve and esophagus

3 Right hepatic vein and crura of diaphragm

4 Inferior vena cava and greater splanchnic nerve

5 Portal vein and hepatic artery

6 Celiac plexus and celiac artery

7 Hepatic lymph node and hepatic rami of vagus nerve

8 Gastroduodenal artery and suprapyloric lymph nodes

9 Superior gastric lymph nodes

10 Duodenum

11 Superior mesenteric artery and vein

12 Subpyloric lymph nodes

13 Right gastroepiploic artery and vein

14 Inferior gastric lymph nodes

15 Diaphragm

16 Serosa

17 Paracardial lymph nodes

18 Left vagus nerve and longitudinal muscular layer

19 Abdominal aorta and circular muscular layer

20 Left gastric artery and oblique muscular layer

21 Celiac rami of vagus nerve and gastric mucosa

22 Splenic lymph nodes

23 Left gastric (coronary) vein and splenic rami of vagus nerve

24 Splenic artery and vein

25 Gastric rami of vagus nerve

26 Left gastroepiploic artery and vein

27 Gastric lymphatic plexus

This is one of a series of paintings for Lederle by Paul Peck, illustrating the anatomy of various organs and tissues of the body which are frequently attacked by infection, where aureomycin may prove useful.

Lederle

can Medical Association. Title of the essay was: "Why the Private Practice of Medicine Furnishes This County With the Best Medical Care." First prize of $100 was won by Patsy Midyett of East High School, second prize of $50 went to William Allen Bramlette, Jr., of East High School, and third prize of $25 was won by Jo Elle Nicolae of St. Francis de Sales High School.

Judges were Dr. Douglas Macomber, Editor of the Rocky Mountain Medical Journal; Harry Fontius, Jr., prominent business man, and Mrs. Myrtle F. Sugarman, supervising teacher, Denver Public Schools.

Mr. George W. Kelly, Editor of Green Thumb Magazine, gave a timely presentation on "Planning Your Garden" at the April meeting. The fact that many interested ladies listened avidly to gardening information, should result in added beauty in Denver gardens this year.

EASTERN COLORADO

The Auxiliary to Eastern Colorado Medical Society met March 17 at Flagler. Twenty dollars was voted for the Nursing Scholarship Fund and two subscriptions for Today's Health were voted. Discussion of "Nurse Recruiting Days" was held, hoping thereby to show the new film at various towns.

Mrs. Beethe of Burlington began a book review of The Sojourner, the review to be concluded at the May meeting. The Auxiliary members attended and enjoyed a dinner with the members of the Eastern Colorado Medical Society.

MESA COUNTY

The Woman's Auxiliary to the Mesa County Medical Society meets monthly for dinner, a business meeting and usually a discussion of current problems.

As their project the Auxiliary decided to support the Crippled Children's Clinic as much as possible. All of the members have given educational toys, and Mrs. Stanley Crosbie is spending one afternoon a week teaching clay sculpture to those most in need of that type of therapy. The group has also adopted the family of one of the patients, a family which consists of the parents and five children. The Auxiliary pays for the patients' treatments and helps clothe the family. In December a Christmas party was held for all of the patients and their brothers and sisters.

During the past year the ladies have baked cakes and raffled them, thus earning $50. To this amount was added another $50 from the treasury. The entire amount was given to the new Lower Valley Hospital at Fruita.

There is an annual dinner dance held in December, when the Auxiliary members are guests of their husbands. Once during the year the Auxiliary meets with the Dental Auxiliary for dinner and a social evening.

With few exceptions, representatives of the schools in the state are being cooperative in seeing that pamphlets pertaining to the "Dr. Tim, Detective" series are distributed to the sudents in the schools.

MONTANA
Medical Association

CASCADE COUNTY TO HOLD FOURTH ANNUAL MEDICAL-SURGICAL CONFERENCE

The fourth annual Cascade County Medical-Surgical Conference will be held at the Meadow Lark Country Club, Great Falls, Montana, on Monday and Tuesday, June 22 and 23.

Guest speakers at this conference will include the following:

Norman F. Miller, M.D., Professor of Obstetrics and Gynecology, University of Michigan Medical School, Ann Arbor.

Arthur Curtis, M.D., Professor and Chairman, Department of Dermatology and Syphilology, University of Michigan Medical School, Ann Arbor.

A. C. Furstenberg, M.D., and Professor of Otolaryngology, University of Michigan Medical School, Ann Arbor.

Carl Moyer, M.D., Professor of Surgery, Washington University Medical School, St. Louis.

M. Digby Leigh, M.D., Professor of Anesthesiology, University of British Columbia, Vancouver.

Wesley Spink, M.D., Professor of Medicine, University of Minnesota Medical School, Minneapolis.

Arild Hansen, M.D., Professor of Pediatrics, University of Texas Medical School, Galveston.

Each guest speaker will deliver two didactic lectures, and there will be round-table discussions on each of the two days. A banquet for physicians and their ladies will be held Monday evening, June 22.

Dr. Earl L. Hall of Great Falls is chairman of the Program Committee, and will mail detailed programs to all interested physicians.

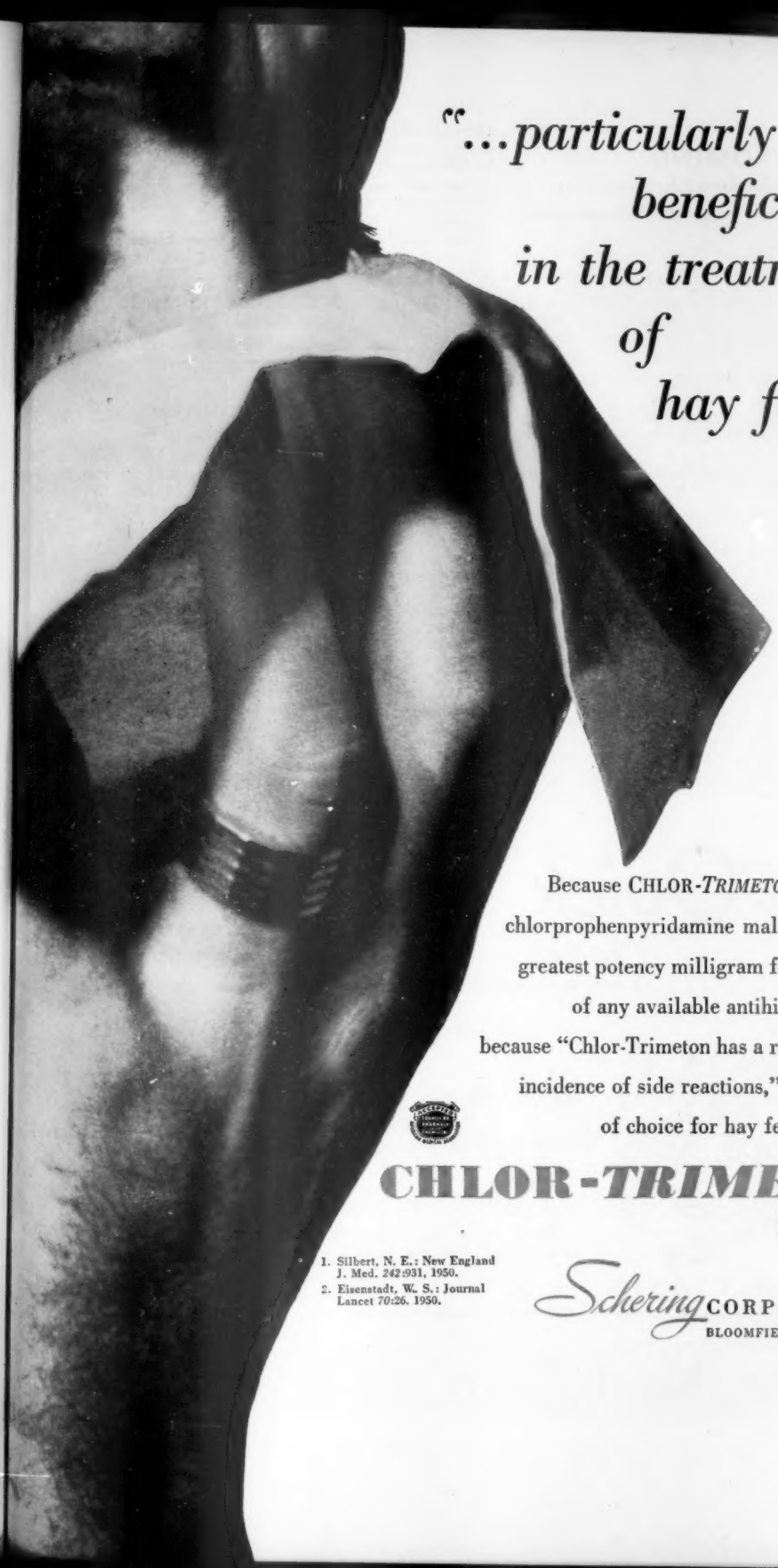
"YOUR DOCTOR" FILM IS P. R. AID

Tops on the list of 1953 public relations aids for medical societies is the "Your Doctor" film. Local societies are urged to continue its promotion through two channels—(1) encourage commercial theaters to book the film through RKO-Radio Pictures; (2) arrange showings of the 16mm. version to all segments of the community.

In most areas, a brief announcement of the availability of "Your Doctor" will stimulate a continuing demand. The 16mm. version can be booked in two ways. The AMA has arranged for Modern Talking Picture Service to handle orders throughout the country. Only charge is for postage and insurance. The second booking method is through State and County Societies. Individual prints may be secured at $70 per copy from RKO-Radio Pictures and requests filled by society offices. Purchase 16mm. prints from Mr. Arthur M. Good, RKO-Radio Pictures, 1270 Avenue of the Americas, New York, N. Y.

PENICILLIN ANAPHYLAXIS

The Federal Food and Drug Administration would be interested in receiving reports of acute anaphylactic shock from the administration of penicillin. Any physician encountering such a reaction is urged to advise Mr. R. L. Horst, Chief, Denver District, Food and Drug Administration, 531 New Customhouse, Denver 2, Colorado. The telephone number is KEystone 4151, Extension 588.



"...particularly beneficial in the treatment of hay fever."[1]

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maleate

1. Silbert, N. E.: New England J. Med. *242*:931, 1950.
2. Eisenstadt, W. S.: Journal Lancet *70*:26, 1950.

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WYOMING
State Medical Society

Auxiliary

WYOMING STATE AUXILIARY NEWS

Even though the Public Relations meeting held in Denver in December has been reported many times, the ideas presented there cannot be repeated too often. Some of these are:

1. The fight against socialized medicine must not be lessened.

2. Authoritative Grievance Committees must be formed to cure faults of the few who rob the profession of its due esteem.

3. The doctors' offices must be efficiently run by ethical personnel.

4. Doctors must take part in civic activities and organizations.

Mrs. Ed J. Guilfoyle of Newcastle, Wyoming, President of Wyoming State Auxiliary, and Mrs. J. Cedric Jones, State Public Relations Chairman, attended this meeting as the Auxiliary representatives.

Literature is now being mailed stressing attendance at the 30th Annual Meeting of the Woman's Auxiliary of the A.M.A., to be held in New York City June 1-5, 1953, at the Hotel Statler.

A thirteen-week series of Public Relation transcripts have been presented over Cody, Wyoming's Station KODI under sponsorship of the Northwest Medical Society. This is one of the series offered by the A.M.A. The subject material covers infant care and has been well received by the listening public.

The last meeting of the Northwest Medical Society was a joint dinner meeting held in Cody in January.

The Wyoming State Medical Society meeting will be held in Casper June 11, 12 and 13, 1953, with Newcastle as host.

MRS. J. CEDRIC JONES,
Public Relations Chairman,
Wyoming Medical Auxiliary.

Rocky Mountain Men Hold High G.P. Offices

Two representatives of the Rocky Mountain region will be in positions of leadership in the American Academy of General Practice for the coming year as the result of elections at the Academy's recent annual session in St. Louis, Missouri.

Dr. U. R. Bryner of Salt Lake City was installed as President of the national organization March 25. He was chosen President-elect a year previously. At the same time Dr. Cyrus W. Anderson of Denver was elected and installed for a three-year term as a member of the Board of Directors of the Academy. Drs. Irving Baumgartner of Oakland, Maryland, and William Sproul of Des Moines, Iowa, were also elected to three-year terms as Directors, and Dr. Merrill Shaw of Seattle, Washington, was elected Vice President. Dr. William B. Hildebrand of Menasha, Wisconsin, was elected President-elect, to succeed Dr. Bryner in 1954.

COLORADO
Medical School Notes

POSTGRADUATE COURSE IN RHEUMATIC FEVER AND RELATED CONDITIONS IN CHILDREN

The University of Utah College of Medicine, Department of Postgraduate Education, in conjunction with the Utah State Department of Health, will sponsor a course in Rheumatic Fever and Related Conditions in Children, to be held June 11 through June 13, 1953, at the Salt Lake General Hospital, Salt Lake City.

Visiting speakers will be Dr. T. Duckett Jones, Medical Director of the Helen Hay Whitney Foundation; Dr. Robert A. Good, Assistant Professor of Pediatrics and Markle Medical Fellow, University of Minnesota; Dr. Robert A. Aldrich, Assistant Professor of Pediatrics, University of Oregon, and Capt. Chandler Stetson, U.S.A.F., Streptococcal Disease Laboratories, Fort Warren Air Force Base, Cheyenne, Wyoming.

Applications and requests for further information should be sent to Dr. John Waldo, Director, Department of Postgraduate Medical Education, College of Medicine, University of Utah, Salt Lake City, Utah.

The Book Corner

New Books Received

Diagnostic Tests in Neurology, a Selection for Office Use: By Robert Wartenberg, M.D.; Forewords by Sir Gordon Holmes, M.D., F.R.S., and by Stanley Truman, M.D. The Year Book Publishers, Inc., 200 East Illinois Street, Chicago, 1953. Price, $4.50.

Encyclopedia of Aberrations, a Psychiatric Handbook: Edited by Edward Podolsky, M.D., State University of New York Medical College, with a Foreword by Alexandra Adler, M.D., New York University College of Medicine. Philosophical Library, New York, 1953. Price, $10.00.

Pheochromocytoma and the General Practitioner: By Joseph L. DeCourcy, M.D., and Cornelius B. DeCourcy, M.D., Authors of Pathology and Surgery of the Thyroid. DeCourcy Clinic, Cincinnati 2, Ohio, 1952.

Modern Treatment, a Guide for General Practice, by Fifty-three Authors: Edited by Austin Smith, M.D., Editor of the Journal of the American Medical Association, and Paul L. Wermer, M.D., Secretary, Committee on Research, A.M.E. Published by Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York, 1953. Price, $20.00.

Book Review

The Origin of Life and the Evolution of Living Things—An Environmental Therapy: By Olin R. Hyndman, B.S., M.D., F.A.C.S. Philosophical Library, New York. Price, $8.75.

This exceptionally fine book by a former member of the Colorado State Medical Society

represents the fruitful crystalization of the thoughts of a man who is simultaneously an accomplished neurosurgeon, scientific investigator, chemist and philosopher. It will appeal to and be of benefit to any reader with interest of a scientific or philosophical nature because of the new concepts it introduces in explaining the origin and evolution of living things as manifestations of known and comprehensible physico-chemical laws. The documentation and examples given display a fund of knowledge so varied and profound that it is impressive as well as authoritative.

The Preface defines his purpose and intent and contains philosophical observations concerning the reason for and potential of man. The crucial importance of the message is admirably enhanced by the excellent style of presentation. The reader will carry away much worth quoting from this delightful section.

Stating his belief that "scientific (natural) phenomena are invariable," he points out in the Introduction three major premises leading to his conclusions on origin and evolution which exclude fortuitous mutation as a factor. Briefly stated: "Every change is related to and is contingent upon the change or changes that precede it"; "living matter is constructed of the materials of non-living matter, and function is an expression of unique combinations"; "I have avoided the incorporation of the anticipatory idea in nature" (mysticism is unnecessary for natural law can adequately account for life). The idea is carried out without offense to or the destruction of a concept of God.

Subsequently the author explains that the characteristic changes that occur, to which we apply the term life, are manifestations of energy exchange. The basic energy exchange system is oxidation and this is sometimes obscure because it is extensively controlled by catalytic action. In the biologic life process chromatin is the key factor since it catalyzes oxidation and its own synthesis. "The unique feature of biologic life is the continual synthesis of that substance which catalyzes the energy exchange." The recognizable form and function of the living thing merely shows the result of the adaptation necessary to maintain this process which is life. Therefore, there is no mysterious factor involved in life, but rather systems and processes which obey natural law and order.

The comprehension of the origin of life and its evolutionary change necessitates recognizing two essential principles. The first principle, encompassing origin, holds that "wherever a source of energy other than heat exists, the energy will exert a potential force toward greater entropy (second law of thermodynamics)." The basic unit of life, the germ integer (gene) resulted from the impress of sunlight on the water which contained the necessary elements in solution and therefore able to form various compounds. Out of this situation came the compound of the plant germ integer which could utilize (or catalyze) the energy of oxidation and at the same time synthesize itself, thus the first self-perpetuating system. Oxidation then became the permanent earthly source of energy for plants and later animals.

"The second principle holds that all living things are compounded of ultimate units of living substance." The ultimate unit or germ integer is the gene. All the multicellular organisms are constructed of the cell; however, this is not the primary unit but probably represents the mid-

point of organic evolution. The gene is the indivisible unit of living substance. The cell developed to provide a constant protective environment for the gene. The synthesis of the gene is always by a chronologic retracement with all steps occurring just as embryology shows the organism to reproduce itself by a chronological development termed recapitulation. The cell, however, retraces independently.

The cell by itself has little ability for adapting to environmental changes so that the multicellular organism developed to give much greater ability for adaption. "The individual is an instrument by which continual adaptation can be made and reproduction consummated."

The author maintains organization of the material by integration into four orders of differentiation in which the germ integer (gene) is the first order of differentiation, the cell the second order, the multicellular forms the third order and the intraspecies integration the fourth order of differentiation. An "environmental" theory results which is termed the R. R. S. Theory symbolic of Reaction which deals with origin and adaptation of living substance, Retracement concerning reproduction and heredity, and Summation of these factors resulting in the organismal type.

To those who seek a new point of view the book is recommended; for those who wish a profound experience this book is mandatory.

MARVIN E. JOHNSON, M.D.

A Doctor's Pilgrimage: By Edmund A. Brasset, M.D. J. B. Lippincott Company, Philadelphia and New York.

Since most memoirs are written by older men, it is with pleasant surprise that we discover Dr. Brasset is still a comparatively young man, having been born in 1907 in Nova Scotia. On the whole, this is most fortunate as he can look back clearly on his early trials and well intentioned errors with great, good humor and give us a very revealing picture of a young man getting a foothold in his chosen profession.

Filled with the desire to be a brain surgeon, but unable to finance further education, Dr. Brasset's pilgrimage began in a bleak, coastal town in Nova Scotia. He tried a mining town which proved equally unremunerative. It did, however, bring marriage to Sally who had been

his "comet" during medical school. He and Sally enjoyed a temporary rest from money worries the next year when he had a salaried job on the resident staff of a mental hospital. After a short postgraduate refresher course, he resumed practice in a small community of kindly people of French descent who lived in simplicity but secure comfort; then, too, they paid their bills!

A few years, and two children later, Dr. Brasset was invited to take the surgical residency of which he had so long dreamed, and began work under a famous brain surgeon. The door was open at last to his long standing ambition; only to find that he did not want to be a specialist, even one so exalted as a brain surgeon. It was all too impersonal for patients were known only by their diagnosis. He missed the contact with his friends, his patients, and the sense of belonging to them.

"A Doctor's Pilgrimage" is filled with anecdotes of patients and stories of Nova Scotia told with warm, human appeal that comes from diagnostic episodes which frequently enter into medical experience and autobiographies. His choice to continue as a general practitioner rather than to seek the prestige and income of the specialist, is uncommon among the stories of doctors in their early practice. Included, too, are a number of pictures of his colleagues that are quite apropos.

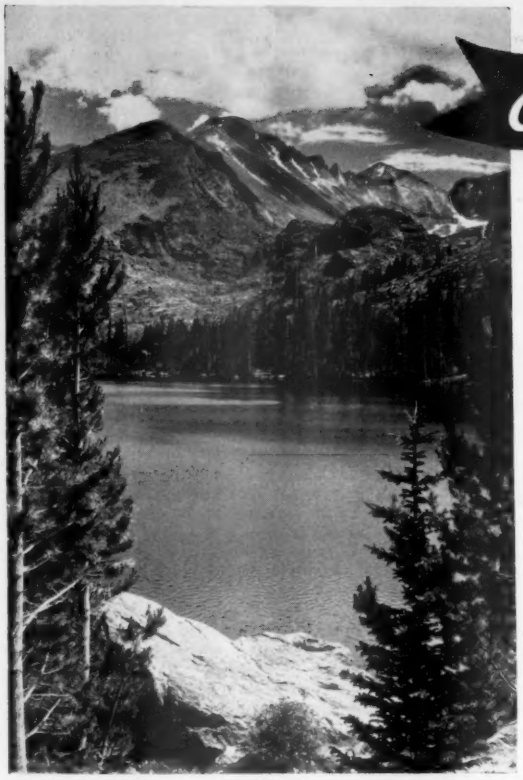
Doctors in small communities might like to recommend this book to selected friends and patients as it gives one doctor's point of view toward patients and people in general.

CHRISTINE TENNYSON.

Back Down the Ridge: By W. L. White, Harcourt, Brace and Company, New York, 1953. Price, $3.00.

This is the Korean War narrowed down to the viewpoint of the badly wounded boy on the litter as he passes down the bloody assembly line, sometimes as far as Walter Reed Hospital in Washington. We start the story with Mr. White watching eleven men get clobbered in various ways and their progress "Back Down the Ridge."

First step: The front-line medics. They bandage or splint, give morphine and, if possible, plasma. They carry the wounded to—



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Second step: The BA tent (battalion aid station), which is so close to the front that it may still come under rifle fire. An elaborate type of first aid enables the wounded to progress to—

Third step: Mash (Mobile Army Surgical Hospital), where the wounded can be operated on within the sound of heavy artillery, where whole, red blood can be given, and where the men spot the nurse and remark about how good it is to see American girls. Leaving Mash by plane, they go to—

Fourth step: Tokoyo, where there is more time for everything. Some patients only spend a night here and then on to—

Fifth step: Letterman Army Hospital, San Francisco, where the wounded are sorted and sent for further treatment and training to whichever of the Army's major hospitals is nearest their home town.

The writer, who completely submerges his own individuality in the personality and idiom of the G. I., uses the pronoun "you" until it becomes you, the reader to whom all this is happening. You are there; you see and you feel. When you pull away at the end of the book you wish it were possible to go down and give all thirty of the pints of blood that it took for just one of the boys to get well.

One might expect this to be a grim and gruesome book. It is not, because of the motif of hope and the sense of ever-expanding miracles that run through it. One does not know which to admire the more, the heroic devotion of the surgeons and nurses, working forty hours at a stretch under nightmare conditions, or the heroic cheerfulness of the men, who are, Mr. White assures us, invariably grateful to be alive, even if mutilated. Nothing is grim when you can do something to relieve it. One thing that stands out above everything else in this book is the actual life and death importance of the blood banks and the necessity of keeping them filled.

Here is a book that cried to be written, and Mr. White has done a superior job of packing it full of facts and drama with magnificently struck home phrases.

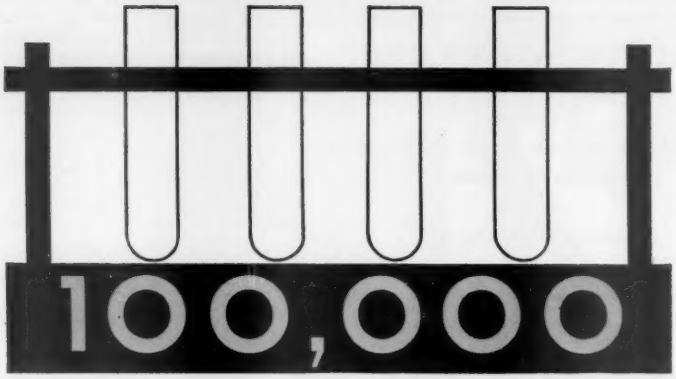
CHRISTINE TENNYSON.

The History of American Epidemiology: By C. E. A. Winslow, Dr.P.H., Professor Emeritus, Yale University School of Medicine; Editor, American Journal of Public Health; Wilson G. Smillie, M.D., Professor and Chairman, Department of Public Health and Preventive Medicine, Cornell University Medical College; James A. Doull, M.D., Medical Director, Leonard Wood Memorial (American Leprosy Foundation), and John E. Gordon, M.D., Professor and Chairman, Department of Epidemiology, School of Public Health, Harvard University. Edited by Franklin H. Top, M.D., Professor of Epidemiology and Pediatrics, College of Medical Science, University of Minnesota. Sponsored by The Epidemiology Section, American Public Health Association. St. Louis: The C. V. Mosby Company, 1952. Price, $4.75.

This short and most interesting book is one, not only of necessary knowledge and appreciation by the public health physician and worker, but also by the general practicing physician.

Over the years epidemiological trends and concepts have undergone many drastic changes, and it is noteworthy how recent have our present day beliefs and research findings become the basis for our epidemiological programs.

Throughout this book much stress is given to the premise that epidemiology is disease behavior, as manifested by groups. And, that the ecologic triad of agent, host and environment is funda-



diabetes detection centers!

"The ideal detection center is the office of the family physician."[1]

Increasing experience in diabetes case-finding indicates that intermittent surveys and mass screening drives, although useful, have certain limitations. Getting and others,[2] in evaluating a community detection campaign (well publicized in the area), report that only 59% of persons accepting the free testing materials actually performed the test. Only 24% of those with positive results sought medical advice.

To find the estimated one million unknown diabetics[3] and place them under needed medical care, the indispensable factor for success is the activity of the individual physician.

1. Blotner, H., and Marble, A.: New England J. Med. *245*:567 (Oct. 11) 1951.
2. Getting, V. A., and others: Diabetes *1*:194, 1952.
3. Wilkerson, H. L. C., and Krall, L. P.: J.A.M.A. *135*:209 (Sept. 27) 1947.

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mental in the over-all understanding of the quantitative causality of mass disease.

Historically, it is stated that for the first century and a half of colonial life there was no "epidemiology" in America. But, the scientific renaissance of the eighteenth century, in which our own Franklin and Rumford and Ruch and Webster played a not undistinguished part, laid the foundation for the achievements which have been won and those which are to follow.

The foreword by Dr. Franklin H. Top is really an ideal review of this book. And to realize the full value of this fact, it is suggested that the reader again peruse the Foreword Section.

J. BURRIS PERRIN, M.D.

WANTADS

ADDITIONAL PHYSICIANS WANTED by the LOVELACE CLINIC, Albuquerque

The Lovelace Clinic, Albuquerque, New Mexico, has attractive openings for five additional physicians. New Mexico license, including Basic Science Board certificate, required. Next meeting of New Mexico Basic Science Board is in early June, so applicants should act promptly. Openings include a Board-Certified Urologist, to head department; a Pediatrician, a Radiologist, an Otolaryngologist, board certification not required, as assistants in those respective departments; and a General Practitioner. For details, contact W. R. Lovelace, M.D., 4800 Gibson Boulevard S.E., Albuquerque.

EXCELLENT OPENING in large Montana town for ENT man. Must do endoscopy work. Salary. Commission or any financial arrangement. Nothing to buy unless partnership wanted. For further information contact Box 5, c/o Rocky Mountain Medical Journal.

OPENING FOR AN M.D. who is assured of remaining civilian for at least 19-24 months after taking position in Livingston, Montana, to replace an M.D. called to service. Total population in Park County and City of Livingston of 12,000. No specialty required, two privately owned hospitals, seven practicing physicians at present time. For further information, contact T. R. Clemons, M.D., 425 South Yellowstone, Livingston, Montana.

ASSISTANT WANTED: Nebraska general practice—convenient to Denver. Salary and percentage. Partnership after years. Ample hospital facilities, pleasant living. Desirable community. Reply fully. Box 3a, Rocky Mountain Medical Journal.

WANTS LOCUM TENES WORK from present until June 1. Will consider shorter period. Have had five years' experience general practitioner. For further information, contact Box 3, Rocky Mountain Medical Journal.

OPENING FOR EXPERIENCED general practitioner in Burlington, Colorado. Dry farming community, several other doctors in the town, 25-bed county hospital, community with population of about 2,500. For further information, contact Mr. Thornton H. Thomas, Jr., Box 447, Burlington, Colorado.

DR. GUY A. ASBAUGH has retired as general practitioner in Weld. Dry town, surrounding community of three towns with total population of 1,200. His house and office are for rent for $100 a month. For further information, call Frederick 2322, or write Box 9, Rocky Mountain Medical Journal, 835 Republic Building.

GENERAL PRACTITIONER, married, 30, desires assistantship, locum tenes, or industrial practice in Colorado for about six months following release from Navy June 1, 1953. Contact G. J. Williams, M.D., 5800 Spilman, Sacramento, California.

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1. Frost, L. H., and Jackson, R. L.: J. Pediat. 39: 585-592, 1951.

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